

TIMSS 1999 USER GUIDE for the INTERNATIONAL DATABASE

IEA's Repeat of the Third International Mathematics
and Science Study at the Eighth Grade



Supplement
One

International
Version
of the
Background
Questionnaires



Boston College
Lynch School
of Education

Supplement 1: International Version of the TIMSS 1999 Background Questionnaires

Overview

This supplement contains the international version of the TIMSS 1999 background questionnaires in the following five sections:

- Section 1: Student Background Questionnaire - General Science Version
- Section 2: Student Background Questionnaire - Separate Science Subject Version
- Section 3: Mathematics Teacher Background Questionnaire
- Section 4: Science Teacher Background Questionnaire
- Section 5: School Background Questionnaire

It also contains the lists of the international background variables corresponding to each of the background questionnaire items that were administered. For the student questionnaires, although there were two versions administered, only one list is presented where it is indicated whether the variables were included in the general science, the separate science, or both questionnaires.

The questionnaires were designed to provide an opportunity for individual countries to make modifications to some questions or response options. This allowed countries to include the appropriate wording or options most consistent with their own national systems. In the international versions of the questionnaires, such questions contain instructions to the National Research Coordinators (NRC) to substitute the appropriate wording for their country and/or to modify or delete any inappropriate questions or options. These instructions were indicated in two ways in the questionnaires by the text <NRC NOTE:> and <International Option>. When used it was an indicator that the NRC was to substitute, if necessary, an appropriate national option that would retain the same basic interpretation as the international version.

The documentation of the national adaptations of the background questionnaire items is included in Supplement 2. This provides the user with information required to evaluate the availability of internationally comparable data for use in secondary analyses involving the TIMSS background variables.

Even though the TIMSS 1999 Database also contains the TIMSS 1995 Database, in this User Guide we are including only the background questionnaires administered as part of the TIMSS 1999 Assessment. The

lists of variables given for each of the 1999 questionnaires indicate whether the question was also administered and available in the questionnaires administered in 1995. The questionnaires included with this Supplement have each question with its corresponding variable name in the margin. When the question was administered in 1995, the variable name is followed by “(t)” indicating trend information is available. The international versions of the background questionnaires from the 1995 assessment are available with the User Guide for the 1995 Database.

The international background variables are listed in this supplement in order of the corresponding questions in the international version of the background questionnaires. For each background variable, the corresponding international questionnaire location is given. The questionnaire item numbers associated with each variable are indicated by field locations according to the formats given in Table S1.1. The lists of background variables for the student, teacher, and school questionnaires are presented in Tables S1.2 through S1.5.

Table S1.1 Background Questionnaire Item Field Location Format Conventions

Questionnaire	Location
Student Questionnaire - General Science version	SQ2-***
Student Questionnaire - Separate Science version	SQ2S-***
Mathematics Teacher Questionnaire (Sections A and B)	TQM2A-*** and TQM2B-***
Science Teacher Questionnaire (Sections A and B)	TQS2A-*** and TQS2B-***
School Questionnaire	SCQ2-***

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 1 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire	
		Location	Question	Location	Question
BSGBIRD	Yes	SQ2-01A	On what day were you born?	SQ2S-01A	On what day were you born?
BSGBIRM	Yes	SQ2-01B	On what month were you born?	SQ2S-01B	On what month were you born?
BSGBIRY	Yes	SQ2-01C	On what year were you born?	SQ2S-01C	On what year were you born?
BSBGSEX	Yes	SQ2-02	Are you a boy or a girl?	SQ2S-02	Are you a boy or a girl?
BSGBRNI	Yes	SQ2-03A	Were you born in <country>?	SQ2S-03A	Were you born in <country>?
BSGBRN2	Yes	SQ2-03B	How old were you when you came to <country>?	SQ2S-03B	How old were you when you came to <country>?
BSBGLANG	Yes	SQ2-04	How often do you speak <language of test> at home?	SQ2S-04	How often do you speak <language of test> at home?
BSBMEXTR	Yes	SQ2-05A	Outside school how much time per week do you spend taking extra lessons in mathematics?	SQ2S-05A	Outside school how much time per week do you spend taking extra lessons in mathematics?
BSBSEXTR	Yes	SQ2-05B	Outside school how much time per week do you spend taking extra lessons in science?	SQ2S-05B	Outside school how much time per week do you spend taking extra lessons in science?
BSBGCLUB	Yes	SQ2-05C	Outside school how much time per week do you spend participating in science or mathematics clubs?	SQ2S-05C	Outside school how much time per week do you spend participating in science or mathematics clubs?
BSBGPAID	Yes	SQ2-05D	Outside school how much time per week do you spend at a paid job?	SQ2S-05D	Outside school how much time per week do you spend at a paid job?
BSBGDAY1	Yes	SQ2-06A	Outside school how much time per day do you spend watching television and videos?	SQ2S-06A	Outside school how much time per day do you spend watching television and videos?
BSBGDAY2	Yes	SQ2-06B	Outside school how much time per day do you spend playing computer games?	SQ2S-06B	Outside school how much time per day do you spend playing computer games?
BSBGDAY3	Yes	SQ2-06C	Outside school how much time per day do you spend playing/talking with friends?	SQ2S-06C	Outside school how much time per day do you spend playing/talking with friends?
BSBGDAY4	Yes	SQ2-06D	Outside school how much time per day do you spend doing jobs at home?	SQ2S-06D	Outside school how much time per day do you spend doing jobs at home?
BSBGDAY5	Yes	SQ2-06E	Outside school how much time per day do you spend playing sports?	SQ2S-06E	Outside school how much time per day do you spend playing sports?
BSBGDAY6	Yes	SQ2-06F	Outside school how much time per day do you spend reading a book for enjoyment?	SQ2S-06F	Outside school how much time per day do you spend reading a book for enjoyment?
BSBMDAY7	Yes	SQ2-06G	Outside school how much time per day do you spend studying or doing homework in mathematics?	SQ2S-06G	Outside school how much time per day do you spend studying or doing homework in mathematics?
BSBSDAY8	Yes	SQ2-06H	Outside school how much time per day do you spend studying or doing homework in science?	SQ2S-06H	Outside school how much time per day do you spend studying or doing homework in science?
BSBGDAY9	Yes	SQ2-06I	Outside school how much time per day do you spend studying or doing homework in other subjects?	SQ2S-06I	Outside school how much time per day do you spend studying or doing homework in other subjects?
BSBGEDMO	No	SQ2-07A	How far did your mother go in school?	SQ2S-07A	How far did your mother go in school?
BSBGEDFA	No	SQ2-07B	How far did your father go in school?	SQ2S-07B	How far did your father go in school?
BSBGEDSE	No	SQ2-08	How far do you expect to go in school?	SQ2S-08	How far do you expect to go in school?
BSBGBRNM	Yes	SQ2-09A	Was your mother born in <country>?	SQ2S-09A	Was your mother born in <country>?
BSBGBRNF	Yes	SQ2-09B	Was your father born in <country>?	SQ2S-09B	Was your father born in <country>?
BSBGBOOK	Yes	SQ2-10	About how many books are there in your home?	SQ2S-10	About how many books are there in your home?
BSBGPS01	Yes	SQ2-11A	Do you have a calculator at your home?	SQ2S-11A	Do you have a calculator at your home?
BSBGPS02	Yes	SQ2-11B	Do you have a computer at your home?	SQ2S-11B	Do you have a computer at your home?
BSBGPS03	Yes	SQ2-11C	Do you have a study desk at home for your own use?	SQ2S-11C	Do you have a study desk at home for your own use?
BSBGPS04	Yes	SQ2-11D	Do you have a dictionary at your home?	SQ2S-11D	Do you have a dictionary at your home?
BSBGPS05	Yes	SQ2-11E	Do you have a <country specific> at your home?	SQ2S-11E	Do you have a <country specific> at your home?
BSBGPS06	Yes	SQ2-11F	Do you have a <country specific> at your home?	SQ2S-11F	Do you have a <country specific> at your home?
BSBGPS07	Yes	SQ2-11G	Do you have a <country specific> at your home?	SQ2S-11G	Do you have a <country specific> at your home?
BSBGPS08	Yes	SQ2-11H	Do you have a <country specific> at your home?	SQ2S-11H	Do you have a <country specific> at your home?
BSBGPS09	Yes	SQ2-11I	Do you have a <country specific> at your home?	SQ2S-11I	Do you have a <country specific> at your home?
BSBGPS10	Yes	SQ2-11J	Do you have a <country specific> at your home?	SQ2S-11J	Do you have a <country specific> at your home?
BSBGPS11	Yes	SQ2-11K	Do you have a <country specific> at your home?	SQ2S-11K	Do you have a <country specific> at your home?
BSBGPS12	Yes	SQ2-11L	Do you have a <country specific> at your home?	SQ2S-11L	Do you have a <country specific> at your home?
BSBGPS13	Yes	SQ2-11M	Do you have a <country specific> at your home?	SQ2S-11M	Do you have a <country specific> at your home?
BSBGPS14	Yes	SQ2-11N	Do you have a <country specific> at your home?	SQ2S-11N	Do you have a <country specific> at your home?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 2 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Science Questionnaire	
		Location	Question	Location	Question
BSBGPS15	Yes	SQ2-110	Do you have a <country specific> at your home?	SQ2S-110	Do you have a <country specific> at your home?
BSBGPS16	Yes	SQ2-11P	Do you have a <country specific> at your home?	SQ2S-11P	Do you have a <country specific> at your home?
BSBSMIP1	Yes	SQ2-12A	My mother thinks it is important for me to do well in science at school.	SQ2S-12A	My mother thinks it is important for me to do well in science at school.
BSBMMIP2	Yes	SQ2-12B	My mother thinks it is important for me to do well in mathematics at school.	SQ2S-12B	My mother thinks it is important for me to do well in mathematics at school.
BSBGMIP3	Yes	SQ2-12C	My mother thinks it is important for me to do well in science at school.	SQ2S-12C	My mother thinks it is important for me to do well in science at school.
BSBGMIP5	Yes	SQ2-12D	My mother thinks it is important for me to have time to have fun.	SQ2S-12D	My mother thinks it is important for me to have time to have fun.
BSBGMIP4	Yes	SQ2-12E	My mother thinks it is important for me to be good at sports.	SQ2S-12E	My mother thinks it is important for me to be good at sports.
BSBMCLS1	Yes	SQ2-13A	In my mathematics class students often neglect their school work.	SQ2S-13A	In my mathematics class students often neglect their school work.
BSBMCLS2	Yes	SQ2-13B	In my mathematics class students are orderly and quiet during lessons.	SQ2S-13B	In my mathematics class students are orderly and quiet during lessons.
BSBMCLS3	Yes	SQ2-13C	In my mathematics class students do exactly as the teacher says.	SQ2S-13C	In my mathematics class students do exactly as the teacher says.
BSBSFIP1	Yes	SQ2-14A	My friends think it is important for me to do well in science at school.	SQ2S-14A	My friends think it is important for me to do well in science at school.
BSBMFIP2	Yes	SQ2-14B	My friends think it is important for me to do well in mathematics at school.	SQ2S-14B	My friends think it is important for me to do well in mathematics at school.
BSBGFIP3	Yes	SQ2-14C	My friends think it is important for me to do well in <language of test> at school.	SQ2S-14C	My friends think it is important for me to do well in <language of test> at school.
BSBGFIP4	Yes	SQ2-14D	My friends think it is important for me to have time to have fun.	SQ2S-14D	My friends think it is important for me to have time to have fun.
BSBGFIP5	Yes	SQ2-14E	My friends think it is important for me to be good at sports.	SQ2S-14E	My friends think it is important for me to be good at sports.
BSBSSIP1	Yes	SQ2-15A	I think it is important to do well in science at school.	SQ2S-15A	I think it is important to do well in science at school.
BSBMSIP2	Yes	SQ2-15B	I think it is important to do well in mathematics at school.	SQ2S-15B	I think it is important to do well in mathematics at school.
BSBGSIP3	Yes	SQ2-15C	I think it is important to do well in <language of test> at school.	SQ2S-15C	I think it is important to do well in <language of test> at school.
BSBGSIP4	Yes	SQ2-15D	I think it is important to have time to have fun.	SQ2S-15D	I think it is important to have time to have fun.
BSBGSIP5	Yes	SQ2-15E	I think it is important to be good at sports.	SQ2S-15E	I think it is important to be good at sports.
BSBMGOOD	Yes	SQ2-16A	I usually do well in mathematics.	SQ2S-16A	I usually do well in mathematics.
BSBSGOOD	Yes	SQ2-16B	I usually do well in science.	~~	I usually do well in science.
BSBMMYT1	No	SQ2-17A	I would like mathematics much more if it were not so difficult.	SQ2S-17A	I would like mathematics much more if it were not so difficult.
BSBMMYT2	No	SQ2-17B	Although I do my best, Mathematics is more difficult for me than for many of my classmates.	SQ2S-17B	Although I do my best, Mathematics is more difficult for me than for many of my classmates.
BSBMMYT3	No	SQ2-17C	I am just not talented in mathematics.	SQ2S-17C	I am just not talented in mathematics.
BSBMMYT4	No	SQ2-17D	Sometimes, when I do not understand a new topic initially in math, I never understand it.	SQ2S-17D	Sometimes, when I do not understand a new topic initially in math, I never understand it.
BSBMMYT5	No	SQ2-17E	Mathematics is not one of my strengths.	SQ2S-17E	Mathematics is not one of my strengths.
BSBMDOW1	Yes	SQ2-18A	To do well in mathematics you need lots of natural ability.	SQ2S-18A	To do well in mathematics you need lots of natural ability.
BSBMDOW2	Yes	SQ2-18B	To do well in mathematics you need good luck.	SQ2S-18B	To do well in mathematics you need good luck.
BSBMDOW3	Yes	SQ2-18C	To do well in mathematics you need lots of hard work studying at home.	SQ2S-18C	To do well in mathematics you need lots of hard work studying at home.
BSBMDOW4	Yes	SQ2-18D	To do well in mathematics you need to memorize the textbook or notes.	SQ2S-18D	To do well in mathematics you need to memorize the textbook or notes.
BSBSSYT1	No	SQ2-19A	I would like science much more if it were not so difficult.	~~	I would like science much more if it were not so difficult.
BSBSSYT2	No	SQ2-19B	Although I do my best, science is more difficult for me than for many of my classmates.	~~	Although I do my best, science is more difficult for me than for many of my classmates.
BSBSSYT3	No	SQ2-19C	I am just not talented in science.	~~	I am just not talented in science.
BSBSSYT4	No	SQ2-19D	Science is not one of my strengths.	~~	Science is not one of my strengths.
BSBSDOW1	Yes	SQ2-20A	To do well in science you need lots of natural ability.	SQ2S-23A	To do well in science you need lots of natural ability.
BSBSDOW2	Yes	SQ2-20B	To do well in science you need good luck.	SQ2S-23B	To do well in science you need good luck.
BSBSDOW3	Yes	SQ2-20C	To do well in science you need lots of hard work studying at home.	SQ2S-23C	To do well in science you need lots of hard work studying at home.
BSBSDOW4	Yes	SQ2-20D	To do well in science you need to memorize the textbook or notes.	SQ2S-23D	To do well in science you need to memorize the textbook or notes.
BSBMLIKM	No	SQ2-21A	How much do you like mathematics?	SQ2S-24A	How much do you like mathematics?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 3 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Science Questionnaire	
		Location	Question	Location	Question
BSBSLIK3	No	SQ2-21B	How much do you like science?	~~	How much do you like science?
BSBMLUCM	No	SQ2-22A	How much do you like using computers to learn mathematics?		
BSBSLUCS	No	SQ2-22B	How much do you like using computers to learn science?		
BSBGINT1	No	SQ2-23A/A	Do you have access to the Internet at home?		
BSBGINT2	No	SQ2-23A/B	Do you have access to the Internet at school?		
BSBGINT3	No	SQ2-23A/C	Do you have access to the Internet elsewhere?		
BSBGOF1	No	SQ2-23B/D	How often do you use e-mail to work w/students in other schools on math projects?		
BSBGOF2	No	SQ2-23B/E	How often do you use e-mail to work w/students in other schools on science projects?		
BSBGOF3	No	SQ2-23B/F	How often do you use www to access information for math projects?		
BSBGOF4	No	SQ2-23B/G	How often do you use www to access information for science projects?		
BSBMENJY	Yes	SQ2-24A	Do you think that you enjoy learning mathematics?		
BSBMBORE	Yes	SQ2-24B	Do you think that mathematics is boring?		
BSBMEASY	Yes	SQ2-24C	Do you think that mathematics is an easy subject?		
BSBMLIFE	Yes	SQ2-24D	Do you think that mathematics is important to everyone's life?		
BSBMWORK	Yes	SQ2-24E	Do you think that you would like a job that involved using mathematics?		
BSBMJOB	Yes	SQ2-25A	I need to do well in mathematics to get the job I want		
BSBMPRNT	Yes	SQ2-25B	I need to do well in mathematics to please my parents		
BSBMSCHL	Yes	SQ2-25C	I need to do well in mathematics to get into the school I prefer.		
BSBMSELF	Yes	SQ2-25D	I need to do well in mathematics to please myself.		
BSBMPROB	Yes	SQ2-26A	How often does the teacher show how to do mathematics problems in your math lesson?		
BSBMNOTE	Yes	SQ2-26B	How often do you copy notes from the board in your mathematics lesson?		
BSBMTEST	Yes	SQ2-26C	How often do you have a quiz or test in your mathematics lesson?		
BSBMPROJ	Yes	SQ2-26D	How often do you work on mathematics projects in your mathematics lesson?		
BSBMWSHT	Yes	SQ2-26E	How often do you work from worksheets or textbooks alone in your mathematics lesson?		
BSBMCALC	Yes	SQ2-26F	How often do you use calculators in your mathematics lesson?		
BSBMCOMP	Yes	SQ2-26G	How often do you use computers in your mathematics lesson?		
BSBMEVLF	Yes	SQ2-26H	How often do you use things from life to solve problems in your mathematics lesson?		
BSBMSGRP	Yes	SQ2-26I	How often do you work together in pairs or small groups in your mathematics lesson?		
BSBMHWGV	Yes	SQ2-26J	How often does the teacher give homework in your mathematics lesson?		
BSBMHWCL	Yes	SQ2-26K	How often do you begin homework in class in your mathematics lesson?		
BSBMHWTC	Yes	SQ2-26L	How often does the teacher check homework in your mathematics lesson?		
BSBMHWFC	Yes	SQ2-26M	How often do you check each other's homework in your mathematics lesson?		
BSBMHWDS	Yes	SQ2-26N	How often do you discuss completed homework in your mathematics lesson?		
BSBMUSBT	No	SQ2-26O	How often does the teacher use the board in your mathematics lesson?		
BSBMUSOT	No	SQ2-26P	How often does the teacher use an overhead projector in your mathematics lesson?		
BSBMUSBS	No	SQ2-26Q	How often do students use the board in your mathematics lesson?		
BSBMUSOS	No	SQ2-26R	How often do students use the overhead projector in your mathematics lesson?		
BSBMRUPT	No	SQ2-26S	How often does the teacher get interrupted by messages etc. in your math lesson?		
BSBMIDEA	No	SQ2-26T	How often does the teacher use a computer to demonstrate ideas in your math lesson?		
BSBMRULE	Yes	SQ2-27A	How often does the teacher explain rules and definitions when beginning new math topics?		

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 4 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire		Question
		Location	Location	Location	Location	
BSBMPRAC	Yes	SQ2-27B	SQ2S-30B	How often do you discuss a practical problem when beginning new mathematics topics?		
BSBMSMGF	Yes	SQ2-27C	SQ2S-30C	How often do you work together in small groups on a problem when beginning new math topics?		
BSBMASK	Yes	SQ2-27D	SQ2S-30D	How often does the teacher asks what you know about the topic when beginning new math topics?		
BSBMTXBK	Yes	SQ2-27E	SQ2S-30E	How often do you look at textbook while teacher talks about it when beginning new math topics?		
BSBMEG	Yes	SQ2-27F	SQ2S-30F	How often do you try to solve a related example when beginning new mathematics topics?		
BSBSSCYE	No	SQ2-28	~~	Are you studying science in school this year?		
BSBSENYJ	Yes	SQ2-29A	~~	Do you think that you enjoy learning science?		
BSBSBORE	Yes	SQ2-29B	~~	Do you think that science is boring?		
BSBSEASY	Yes	SQ2-29C	~~	Do you think that science is an easy subject?		
BSBSLIFE	Yes	SQ2-29D	~~	Do you think that science is important to everyone's life?		
BSBSWORK	Yes	SQ2-29E	~~	Do you think that you would like a job that involved using science?		
BSBSJOB	Yes	SQ2-30A	~~	I need to do well in science to get the job I want.		
BSBSPRINT	Yes	SQ2-30B	~~	I need to do well in science to please my parents.		
BSBSSCHL	Yes	SQ2-30C	~~	I need to do well in science to get into the school I prefer.		
BSBSSELF	Yes	SQ2-30D	~~	I need to do well in science to please myself.		
BSBSPROB	Yes	SQ2-31A	~~	How often does the teacher show how to do science problems in your science lesson?		
BSBSNOTE	Yes	SQ2-31B	~~	How often do you copy notes from the board in your science lesson?		
BSBSTEST	Yes	SQ2-31C	~~	How often do you have a quiz or test in your science lesson?		
BSBSPROJ	Yes	SQ2-31D	~~	How often do you work on science projects in your science lesson?		
BSBSWSHT	Yes	SQ2-31E	~~	How often do you work from worksheets or textbooks alone in your science lesson?		
BSBSCALC	Yes	SQ2-31F	~~	How often do you use calculators in your science lesson?		
BSBSCOMP	Yes	SQ2-31G	~~	How often do you use computers in your science lesson?		
BSBSEVLF	Yes	SQ2-31H	~~	How often do you use things from life to solve problems in your science lesson?		
BSBSSGRP	Yes	SQ2-31I	~~	How often do you work together in pairs or small groups in your science lesson?		
BSBSHWGV	Yes	SQ2-31J	~~	How often does the teacher give homework in your science lesson?		
BSBSHWCL	Yes	SQ2-31K	~~	How often do you begin homework in class in your science lesson?		
BSBSHWTC	Yes	SQ2-31L	~~	How often does the teacher check homework in your science lesson?		
BSBSHWFC	Yes	SQ2-31M	~~	How often do you check each other's homework in your science lesson?		
BSBSHWDS	Yes	SQ2-31N	~~	How often do you discuss completed homework in your science lesson?		
BSBSEMO	Yes	SQ2-31O	~~	How often does the teacher demonstrate an experiment in your science lesson?		
BSBSEXP	Yes	SQ2-31P	~~	How often do you do an experiment in your science lesson?		
BSBSUSBT	No	SQ2-31Q	~~	How often does the teacher use the board in your science lesson?		
BSBSUSOT	No	SQ2-31R	~~	How often does the teacher use an overhead projector in your science lesson?		
BSBSUSBS	No	SQ2-31S	~~	How often do students use the board in your science lesson?		
BSBSUSOS	No	SQ2-31T	~~	How often do students use the overhead projector in your science lesson?		
BSBSRUPT	No	SQ2-31U	~~	How often does the teacher get interrupted by messages etc. in your science lesson?		
BSBSIDEA	No	SQ2-31V	~~	How often does the teacher use a computer to demonstrate ideas in your science lesson?		
BSBSRULE	Yes	SQ2-32A	~~	How often does the teacher explain rules and definitions when beginning new science topics?		
BSBSPRAC	Yes	SQ2-32B	~~	How often do you discuss a practical problem when beginning new science topics?		
BSBSSMGF	Yes	SQ2-32C	~~	How often do you work together in small groups on a problem when beginning new science topics?		

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 5 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire		Question
		Location	Location	Location	Location	
BSBSASK	Yes	SQ2-32D		~~		How often does the teacher asks what you know about the topic when beginning new science topics?
BSBSTXBK	Yes	SQ2-32E		~~		How often do you look at textbook while teacher talks about it when beginning new science topics?
BSBSEG	Yes	SQ2-32F		~~		How often do you try to solve a related example when beginning new science topics?
BSBGADU1	Yes	SQ2-33A		SQ2S-48A		Does your mother live at home with you?
BSBGADU2	Yes	SQ2-33B		SQ2S-48B		Does your father live at home with you?
BSBGADU3	Yes	SQ2-33C		SQ2S-48C		Do any brothers live at home with you?
BSBGADU4	Yes	SQ2-33D		SQ2S-48D		Do any sisters live at home with you?
BSBGADU5	Yes	SQ2-33E		SQ2S-48E		Do you have a stepmother who lives with you?
BSBGADU6	Yes	SQ2-33F		SQ2S-48F		Do you have a stepfather who lives with you?
BSBGADU7	Yes	SQ2-33G		SQ2S-48G		Do any grandparents live at home with you?
BSBGADU8	Yes	SQ2-33H		SQ2S-48H		Do any other relatives live at home with you?
BSBGADU9	Yes	SQ2-33I		SQ2S-48I		Do any non-relatives live at home with you?
BSBGHOME	Yes	SQ2-34		SQ2S-49		Altogether how many people live in your home?
BSBGACT1	Yes	SQ2-35A		SQ2S-50A		How often do you read a book or magazine?
BSBGACT2	Yes	SQ2-35B		SQ2S-50B		How often do you visit a museum or art exhibition?
BSBGACT3	Yes	SQ2-35C		SQ2S-50C		How often do you attend a concert?
BSBGACT4	Yes	SQ2-35D		SQ2S-50D		How often do you go to the theatre?
BSBGACT5	Yes	SQ2-35E		SQ2S-50E		How often do you go to the movies?
BSBGNEWS	Yes	SQ2-36A		SQ2S-51A		How often do you watch news or documentaries on television or video?
BSBGOPER	Yes	SQ2-36B		SQ2S-51B		How often do you watch opera ballet or classical music on television or video?
BSBGNATR	Yes	SQ2-36C		SQ2S-51C		How often do you watch nature, wildlife or history on television or video?
BSBGPOPU	Yes	SQ2-36D		SQ2S-51D		How often do you watch popular music on television or video?
BSBGSPRT	Yes	SQ2-36E		SQ2S-51E		How often do you watch sports on television or video?
BSBGVIDE	Yes	SQ2-36F		SQ2S-51F		How often do you watch video games on television or video?
BSBGCRTN	Yes	SQ2-36G		SQ2S-51G		How often do you watch cartoons on television or video?
BSBGCMDY	Yes	SQ2-36H		SQ2S-51H		How often do you watch comedy adventure or suspense on television or video?
BSBGSSKP	Yes	SQ2-37A		SQ2S-52A		How often did you skip a class last month in school?
BSBGSSTL	Yes	SQ2-37B		SQ2S-52B		How often was something of yours stolen last month in school?
BSBGSHRT	Yes	SQ2-37C		SQ2S-52C		How often did you think another student might hurt you last month in school?
BSBGFSKP	Yes	SQ2-37D		SQ2S-52D		How often did some of your friends skip a class last month in school?
BSBGFSTL	Yes	SQ2-37E		SQ2S-52E		How often did some of your friends have something stolen last month in school?
BSBGFHRT	Yes	SQ2-37F		SQ2S-52F		How often were some of your friends hurt by other students last month in school?
BSBGENV1	Yes	SQ2-38A		SQ2S-53A		How much do you think science can help address air pollution?
BSBGENV2	Yes	SQ2-38B		SQ2S-53B		How much do you think science can help address water pollution?
BSBGENV3	Yes	SQ2-38C		SQ2S-53C		How much do you think science can help address destruction of forests?
BSBGENV4	Yes	SQ2-38D		SQ2S-53D		How much do you think science can help address endangered species?
BSBGENV5	Yes	SQ2-38E		SQ2S-53E		How much do you think science can help address ozone layer damage?
BSBGENV6	Yes	SQ2-38F		SQ2S-53F		How much do you think science can help address problems from nuclear power plants?
BSBSCARE	Yes	SQ2-39		SQ2S-54		Which science would you most prefer to use in a career?
BSBBGOOD	Yes	~~		SQ2S-16B		I usually do well in biological science.

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 6 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire	
		Location	Location	Location	Question
BSBEGOOD	Yes	~~	SQ2S-16C	~~	I usually do well in earth science.
BSBCGOOD	No	~~	SQ2S-16D	~~	I usually do well in chemistry.
BSBPGOOD	No	~~	SQ2S-16E	~~	I usually do well in physics.
BSBSBYT1	No	~~	SQ2S-19A	~~	I would like biological science much more if it were not so difficult.
BSBSBYT2	No	~~	SQ2S-19B	~~	Although I do my best, Biological Science is more difficult for me than for many of my classmates.
BSBSBYT3	No	~~	SQ2S-19C	~~	I am just not talented in biological science.
BSBSBYT4	No	~~	SQ2S-19D	~~	Biological science is not one of my strengths.
BSBSEYT1	No	~~	SQ2S-20A	~~	I would like earth science much more if it were not so difficult.
BSBSEYT2	No	~~	SQ2S-20B	~~	Although I do my best, Earth Science is more difficult for me than for many of my classmates.
BSBSEYT3	No	~~	SQ2S-20C	~~	I am just not talented in earth science.
BSBSEYT4	No	~~	SQ2S-20D	~~	Earth science is not one of my strengths.
BSBSCYT1	No	~~	SQ2S-21A	~~	I would like chemistry much more if it were not so difficult.
BSBSCYT2	No	~~	SQ2S-21B	~~	Although I do my best, Chemistry is more difficult for me than for many of my classmates.
BSBSCYT3	No	~~	SQ2S-21C	~~	I am just not talented in chemistry.
BSBSCYT4	No	~~	SQ2S-21D	~~	Chemistry is not one of my strengths.
BSBSPYT1	No	~~	SQ2S-22A	~~	I would like physics much more if it were not so difficult.
BSBSPYT2	No	~~	SQ2S-22B	~~	Although I do my best, Physics is more difficult for me than for many of my classmates.
BSBSPYT3	No	~~	SQ2S-22C	~~	I am just not talented in physics.
BSBSPYT4	No	~~	SQ2S-22D	~~	Physics is not one of my strengths.
BSBBLIKB	No	~~	SQ2S-24B	~~	How much do you like biological science?
BSBELIKS	No	~~	SQ2S-24C	~~	How much do you like earth science?
BSBCLIKC	No	~~	SQ2S-24D	~~	How much do you like chemistry?
BSBPLIKP	No	~~	SQ2S-24E	~~	How much do you like physics?
BSBBSTDY	Yes	~~	SQ2S-31A	~~	Are you studying biology this year?
BSBCSTDY	Yes	~~	SQ2S-31B	~~	Are you studying chemistry this year?
BSBESTDY	Yes	~~	SQ2S-31C	~~	Are you studying earth science this year?
BSBPSTDY	Yes	~~	SQ2S-31D	~~	Are you studying physics this year?
BSBBENJY	Yes	~~	SQ2S-32A	~~	Do you think that you enjoy learning biology?
BSBBBORE	Yes	~~	SQ2S-32B	~~	Do you think that biology is boring?
BSBBEASY	Yes	~~	SQ2S-32C	~~	Do you think that biology is an easy subject?
BSBBLIFE	Yes	~~	SQ2S-32D	~~	Do you think that biology is important to everyone's life?
BSBBWORK	Yes	~~	SQ2S-32E	~~	Do you think that you would like a job that involved using biology?
BSBBJOB	Yes	~~	SQ2S-33A	~~	I need to do well in biology to get the job I want.
BSBBPRNT	Yes	~~	SQ2S-33B	~~	I need to do well in biology to please my parents.
BSBBSCHL	Yes	~~	SQ2S-33C	~~	I need to do well in biology to get into the school I prefer.
BSBBSELF	Yes	~~	SQ2S-33D	~~	I need to do well in biology to please myself.
BSBBPROB	Yes	~~	SQ2S-34A	~~	How often does the teacher show how to do biology problems in your biology lesson?
BSBBNOTE	Yes	~~	SQ2S-34B	~~	How often do you copy notes from the board in your biology lesson?
BSBBTEST	Yes	~~	SQ2S-34C	~~	How often do you have a quiz or test in your biology lesson?
BSBBPROJ	Yes	~~	SQ2S-34D	~~	How often do you work on biology projects in your biology lesson?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 7 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire		Question
		Location	Location	Location	Location	
BSBWSHT	Yes	~~	~~	SQ2S-34E	~~	How often do you work from worksheets or textbooks alone in your biology lesson?
BSBBCALC	Yes	~~	~~	SQ2S-34F	~~	How often do you use calculators in your biology lesson?
BSBBCOMP	Yes	~~	~~	SQ2S-34G	~~	How often do you use computers in your biology lesson?
BSBBEVLV	Yes	~~	~~	SQ2S-34H	~~	How often do you use things from life to solve problems in your biology lesson?
BSBBSGRP	Yes	~~	~~	SQ2S-34I	~~	How often do you work together in pairs or small groups in your biology lesson?
BSBBHWGV	Yes	~~	~~	SQ2S-34J	~~	How often does the teacher give homework in your biology lesson?
BSBBHWCL	Yes	~~	~~	SQ2S-34K	~~	How often do you begin homework in class in your biology lesson?
BSBBHWTC	Yes	~~	~~	SQ2S-34L	~~	How often does the teacher check homework in your biology lesson?
BSBBHWFC	Yes	~~	~~	SQ2S-34M	~~	How often do you check each other's homework in your biology lesson?
BSBBHWDS	Yes	~~	~~	SQ2S-34N	~~	How often do you discuss completed homework in your biology lesson?
BSBDEMO	Yes	~~	~~	SQ2S-34O	~~	How often does the teacher demonstrate an experiment in your biology lesson?
BSBBEXPR	Yes	~~	~~	SQ2S-34P	~~	How often do you do an experiment in your biology lesson?
BSBBUSBT	No	~~	~~	SQ2S-34Q	~~	How often does the teacher use the board in your biology lesson?
BSBBUSOT	No	~~	~~	SQ2S-34R	~~	How often does the teacher use an overhead projector in your biology lesson?
BSBBUSBS	No	~~	~~	SQ2S-34S	~~	How often do students use the board in your biology lesson?
BSBBUSOS	No	~~	~~	SQ2S-34T	~~	How often do students use the overhead projector in your biology lesson?
BSBBRUPT	No	~~	~~	SQ2S-34U	~~	How often does the teacher get interrupted by messages etc. in your biology lesson?
BSBBIDEA	No	~~	~~	SQ2S-34V	~~	How often does the teacher use a computer to demonstrate ideas in your biology lesson?
BSBBRULE	Yes	~~	~~	SQ2S-35A	~~	How often does the teacher explain rules and definitions when beginning new biology topics?
BSBBPRAC	Yes	~~	~~	SQ2S-35B	~~	How often do you discuss a practical problem when beginning new biology topics?
BSBBSMGP	Yes	~~	~~	SQ2S-35C	~~	How often do you work together in small groups on a problem when beginning new biology topics?
BSBBASK	Yes	~~	~~	SQ2S-35D	~~	How often does the teacher ask what you know about the topic when beginning new biology topics?
BSBBTXBK	Yes	~~	~~	SQ2S-35E	~~	How often do you look at textbook while teacher talks about it when beginning new biology topics?
BSBBEG	Yes	~~	~~	SQ2S-35F	~~	How often do you try to solve a related example when beginning new biology topics?
BSBCENJY	Yes	~~	~~	SQ2S-36A	~~	Do you think that you enjoy learning chemistry?
BSBCBORE	Yes	~~	~~	SQ2S-36B	~~	Do you think that chemistry is boring?
BSBC EASY	Yes	~~	~~	SQ2S-36C	~~	Do you think that chemistry is an easy subject?
BSBCLIFE	Yes	~~	~~	SQ2S-36D	~~	Do you think that chemistry is important to everyone's life?
BSBCWORK	Yes	~~	~~	SQ2S-36E	~~	Do you think that you would like a job that involved using chemistry?
BSBCJOB	Yes	~~	~~	SQ2S-37A	~~	I need to do well in chemistry to get the job I want.
BSBCPRNT	Yes	~~	~~	SQ2S-37B	~~	I need to do well in chemistry to please my parents.
BSBCSCHL	Yes	~~	~~	SQ2S-37C	~~	I need to do well in chemistry to get into the school I prefer.
BSBCSELF	Yes	~~	~~	SQ2S-37D	~~	I need to do well in chemistry to please myself.
BSBCPROB	Yes	~~	~~	SQ2S-38A	~~	How often does the teacher show how to do chemistry problems in your chemistry lesson?
BSBCNOTE	Yes	~~	~~	SQ2S-38B	~~	How often do you copy notes from the board in your chemistry lesson?
BSBCTEST	Yes	~~	~~	SQ2S-38C	~~	How often do you have a quiz or test in your chemistry lesson?
BSBCPROJ	Yes	~~	~~	SQ2S-38D	~~	How often do you work on chemistry projects in your chemistry lesson?
BSBCWSHT	Yes	~~	~~	SQ2S-38E	~~	How often do you work from worksheets or textbooks alone in your chemistry lesson?
BSBCCALC	Yes	~~	~~	SQ2S-38F	~~	How often do you use calculators in your chemistry lesson?
BSBCCOMP	Yes	~~	~~	SQ2S-38G	~~	How often do you use computers in your chemistry lesson?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 8 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire		Question
		Location	Location	Location	Location	
BSBCEVLF	Yes	~~	~~	SQ2S-38H	~~	How often do you use things from life to solve problems in your chemistry lesson?
BSBCSGRP	Yes	~~	~~	SQ2S-38I	~~	How often do you work together in pairs or small groups in your chemistry lesson?
BSBCHWGV	Yes	~~	~~	SQ2S-38J	~~	How often does the teacher give homework in your chemistry lesson?
BSBCHWCL	Yes	~~	~~	SQ2S-38K	~~	How often do you begin homework in class in your chemistry lesson?
BSBCHWTC	Yes	~~	~~	SQ2S-38L	~~	How often does the teacher check homework in your chemistry lesson?
BSBCHWFC	Yes	~~	~~	SQ2S-38M	~~	How often do you check each other's homework in your chemistry lesson?
BSBCHWDS	Yes	~~	~~	SQ2S-38N	~~	How often do you discuss completed homework in your chemistry lesson?
BSBCDEMO	Yes	~~	~~	SQ2S-38O	~~	How often does the teacher demonstrate an experiment in your chemistry lesson?
BSBCEXPX	Yes	~~	~~	SQ2S-38P	~~	How often do you do an experiment in your chemistry lesson?
BSBCUSBT	No	~~	~~	SQ2S-38Q	~~	How often does the teacher use the board in your chemistry lesson?
BSBCUSOT	No	~~	~~	SQ2S-38R	~~	How often does the teacher use an overhead projector in your chemistry lesson?
BSBCUSBS	No	~~	~~	SQ2S-38S	~~	How often do students use the board in your chemistry lesson?
BSBCUSOS	No	~~	~~	SQ2S-38T	~~	How often do students use the overhead projector in your chemistry lesson?
BSBCRUPT	No	~~	~~	SQ2S-38U	~~	How often does the teacher get interrupted by messages etc. in your chemistry lesson?
BSBCIDEA	No	~~	~~	SQ2S-38V	~~	How often does the teacher use a computer to demonstrate ideas in your chemistry lesson?
BSBCRULE	Yes	~~	~~	SQ2S-39A	~~	How often does the teacher explain rules and definitions when beginning new chemistry topics?
BSBCPRAC	Yes	~~	~~	SQ2S-39B	~~	How often do you discuss a practical problem when beginning new chemistry topics?
BSBCSMGP	Yes	~~	~~	SQ2S-39C	~~	How often do you work together in small groups on a problem when beginning new chemistry topics?
BSBCASK	Yes	~~	~~	SQ2S-39D	~~	How often does the teacher ask what you know about the topic when beginning new chemistry topics?
BSBCTXBK	Yes	~~	~~	SQ2S-39E	~~	How often do you look at textbook while teacher talks about it when beginning new chemistry topics?
BSBCEG	Yes	~~	~~	SQ2S-39F	~~	How often do you try to solve a related example when beginning new chemistry topics?
BSBEENJY	Yes	~~	~~	SQ2S-40A	~~	Do you think that you enjoy learning earth science?
BSBEBORE	Yes	~~	~~	SQ2S-40B	~~	Do you think that earth science is boring?
BSBEEASY	Yes	~~	~~	SQ2S-40C	~~	Do you think that earth science is an easy subject?
BSBELIFE	Yes	~~	~~	SQ2S-40D	~~	Do you think that earth science is important to everyone's life?
BSBEWORK	Yes	~~	~~	SQ2S-40E	~~	Do you think that you would like a job that involved using earth science?
BSBEJOB	Yes	~~	~~	SQ2S-41A	~~	I need to do well in earth science to get the job I want.
BSBEPRNT	Yes	~~	~~	SQ2S-41B	~~	I need to do well in earth science to please my parents.
BSBESCHL	Yes	~~	~~	SQ2S-41C	~~	I need to do well in earth science to get into the school I prefer.
BSBESELF	Yes	~~	~~	SQ2S-41D	~~	I need to do well in earth science to please myself.
BSBEPROB	Yes	~~	~~	SQ2S-42A	~~	How often does the teacher show how to do earth science problems in your earth science lesson?
BSBENOTE	Yes	~~	~~	SQ2S-42B	~~	How often do you copy notes from the board in your earth science lesson?
BSBETEST	Yes	~~	~~	SQ2S-42C	~~	How often do you have a quiz or test in your earth science lesson?
BSBEPROJ	Yes	~~	~~	SQ2S-42D	~~	How often do you work on earth science projects in your earth science lesson?
BSBEWSHT	Yes	~~	~~	SQ2S-42E	~~	How often do you work from worksheets or textbooks alone in your earth science lesson?
BSBECALC	Yes	~~	~~	SQ2S-42F	~~	How often do you use calculators in your earth science lesson?
BSBECOMP	Yes	~~	~~	SQ2S-42G	~~	How often do you use computers in your earth science lesson?
BSBEEVLF	Yes	~~	~~	SQ2S-42H	~~	How often do you use things from life to solve problems in your earth science lesson?
BSBESGRP	Yes	~~	~~	SQ2S-42I	~~	How often do you work together in pairs or small groups in your earth science lesson?
BSBEHWGV	Yes	~~	~~	SQ2S-42J	~~	How often does the teacher give homework in your earth science lesson?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 9 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire		Question
		Location	Location	Location	Location	
BSBEHWCL	Yes	~~	~~	SQ2S-42K		How often do you begin homework in class in your earth science lesson?
BSBEHWTC	Yes	~~	~~	SQ2S-42L		How often does the teacher check homework in your earth science lesson?
BSBEHWFC	Yes	~~	~~	SQ2S-42M		How often do you check each other's homework in your earth science lesson?
BSBEHWDS	Yes	~~	~~	SQ2S-42N		How often do you discuss completed homework in your earth science lesson?
BSBEDEMO	Yes	~~	~~	SQ2S-42O		How often does the teacher demonstrate an experiment in your earth science lesson?
BSBEEEXPR	Yes	~~	~~	SQ2S-42P		How often do you do an experiment in your earth science lesson?
BSBEUSBT	No	~~	~~	SQ2S-42Q		How often does the teacher use the board in your earth science lesson?
BSBEUSOT	No	~~	~~	SQ2S-42R		How often does the teacher use an overhead projector in your earth science lesson?
BSBEUSBS	No	~~	~~	SQ2S-42S		How often do students use the board in your earth science lesson?
BSBEUSOS	No	~~	~~	SQ2S-42T		How often do students use the overhead projector in your earth science lesson?
BSBERUPT	No	~~	~~	SQ2S-42U		How often does the teacher get interrupted by messages etc. in your earth science lesson?
BSBEIDEA	No	~~	~~	SQ2S-42V		How often does the teacher use a computer to demonstrate ideas in your earth science lesson?
BSBERULE	Yes	~~	~~	SQ2S-43A		How often does the teacher explain rules and definitions when beginning new earth science topics?
BSBEPRAC	Yes	~~	~~	SQ2S-43B		How often do you discuss a practical problem when beginning new earth science topics?
BSBESMGP	Yes	~~	~~	SQ2S-43C		How often do you work together in small groups on a problem when beginning new earth science topics?
BSBEASK	Yes	~~	~~	SQ2S-43D		How often does the teacher ask what you know about topic when beginning new earth science topics?
BSBETXBK	Yes	~~	~~	SQ2S-43E		How often do you look at textbook as teacher talks about it when beginning new earth science topics?
BSBEEG	Yes	~~	~~	SQ2S-43F		How often do you try to solve a related example when beginning new earth science topics?
BSBPENJY	Yes	~~	~~	SQ2S-44A		Do you think that you enjoy learning physics?
BSBPBORE	Yes	~~	~~	SQ2S-44B		Do you think that physics is boring?
BSBPEASY	Yes	~~	~~	SQ2S-44C		Do you think that physics is an easy subject?
BSBPLIFE	Yes	~~	~~	SQ2S-44D		Do you think that physics is important to everyone's life?
BSBPWORK	Yes	~~	~~	SQ2S-44E		Do you think that you would like a job that involved using physics?
BSBPJOB	Yes	~~	~~	SQ2S-45A		I need to do well in physics to get the job I want.
BSBPFRNT	Yes	~~	~~	SQ2S-45B		I need to do well in physics to please my parents.
BSBPSCHL	Yes	~~	~~	SQ2S-45C		I need to do well in physics to get into the school I prefer.
BSBPSELF	Yes	~~	~~	SQ2S-45D		I need to do well in physics to please myself.
BSBPPROB	Yes	~~	~~	SQ2S-46A		How often does the teacher show how to do physics problems in your physics lesson?
BSBPNOTE	Yes	~~	~~	SQ2S-46B		How often do you copy notes from the board in your physics lesson?
BSBPTEST	Yes	~~	~~	SQ2S-46C		How often do you have a quiz or test in your physics lesson?
BSBPPROJ	Yes	~~	~~	SQ2S-46D		How often do you work on physics projects in your physics lesson?
BSBPWSHT	Yes	~~	~~	SQ2S-46E		How often do you work from worksheets or textbooks alone in your physics lesson?
BSBPCALC	Yes	~~	~~	SQ2S-46F		How often do you use calculators in your physics lesson?
BSBPCOMP	Yes	~~	~~	SQ2S-46G		How often do you use computers in your physics lessons in your physics lesson?
BSBPEVLF	Yes	~~	~~	SQ2S-46H		How often do you use things from life to solve problems in your physics lesson?
BSBPSGRP	Yes	~~	~~	SQ2S-46I		How often do you work together in pairs or small groups in your physics lesson?
BSBPHWGV	Yes	~~	~~	SQ2S-46J		How often does the teacher give homework in your physics lesson?
BSBPHWCL	Yes	~~	~~	SQ2S-46K		How often do you begin homework in class in your physics lesson?
BSBPHWTC	Yes	~~	~~	SQ2S-46L		How often does the teacher check homework in your physics lesson?
BSBPHWFC	Yes	~~	~~	SQ2S-46M		How often do you check each other's homework in your physics lesson?

Table S1.2 Index of International Background Variables for the TIMSS 1999 Student Questionnaire (part 10 of 10)

Variable Name	Available In 1995	General Science Questionnaire		Separate Science Questionnaire	
		Location	Question	Location	Question
BSBPHWDS	Yes	~~	How often do you discuss completed homework in your physics lesson?	SQ2S-46N	How often do you discuss completed homework in your physics lesson?
BSBPDEMO	Yes	~~	How often does the teacher demonstrate an experiment in your physics lesson?	SQ2S-46O	How often does the teacher demonstrate an experiment in your physics lesson?
BSBPXPR	Yes	~~	How often do you do an experiment in your physics lesson?	SQ2S-46P	How often do you do an experiment in your physics lesson?
BSBPUSBT	No	~~	How often does the teacher use the board in your physics lesson?	SQ2S-46Q	How often does the teacher use the board in your physics lesson?
BSBPUSOT	No	~~	How often does the teacher use an overhead projector in your physics lesson?	SQ2S-46R	How often does the teacher use an overhead projector in your physics lesson?
BSBPUSBS	No	~~	How often do students use the board in your physics lesson?	SQ2S-46S	How often do students use the board in your physics lesson?
BSBPUSOS	No	~~	How often do students use the overhead projector in your physics lesson?	SQ2S-46T	How often do students use the overhead projector in your physics lesson?
BSBPRUPT	No	~~	How often does the teacher get interrupted by messages etc. in your physics lesson?	SQ2S-46U	How often does the teacher get interrupted by messages etc. in your physics lesson?
BSBPIDEA	No	~~	How often does the teacher use a computer to demonstrate ideas in your physics lesson?	SQ2S-46V	How often does the teacher use a computer to demonstrate ideas in your physics lesson?
BSBPRULE	Yes	~~	How often does the teacher explain rules and definitions when beginning new physics topics?	SQ2S-47A	How often does the teacher explain rules and definitions when beginning new physics topics?
BSBPPRAC	Yes	~~	How often do you discuss a practical problem when beginning new physics topics?	SQ2S-47B	How often do you discuss a practical problem when beginning new physics topics?
BSBPSMGP	Yes	~~	How often do you work together in small groups on a problem when beginning new physics topics?	SQ2S-47C	How often do you work together in small groups on a problem when beginning new physics topics?
BSBPASK	Yes	~~	How often does the teacher ask what you know about the topic when beginning new physics topics?	SQ2S-47D	How often does the teacher ask what you know about the topic when beginning new physics topics?
BSBPTXBK	Yes	~~	How often do you look at textbook while teacher talks about it when beginning new physics topics?	SQ2S-47E	How often do you look at textbook while teacher talks about it when beginning new physics topics?
BSBPEG	Yes	~~	How often do you try to solve a related example when beginning new physics topics?	SQ2S-47F	How often do you try to solve a related example when beginning new physics topics?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 1 of 8)

Mathematics Teacher Questionnaire		
Variable Name	Available In 1995	Question
BTBGAGE	Yes	Teacher age
BTBGSEX	Yes	Teacher sex
BTBGTAUG	Yes	By the end of this year how many years will you have been teaching?
BTBGTOTL	Yes	In a typical calendar week how many single periods are you formally scheduled?
BTBMSUB1	Yes	In a typical calendar week how many periods are you scheduled to teach mathematics?
BTBSSUB2	Yes	In a typical calendar week how many periods are you scheduled to teach general science?
BTBSSUB3	Yes	In a typical calendar week how many periods are you scheduled to teach physical science?
BTBSSUB4	Yes	In a typical calendar week how many periods are you scheduled to teach earth science?
BTBSSUB5	Yes	In a typical calendar week how many periods are you scheduled to teach life science?
BTBSSUB6	Yes	In a typical calendar week how many periods are you scheduled to teach biology?
BTBSSUB7	Yes	In a typical calendar week how many periods are you scheduled to teach chemistry?
BTBSSUB8	Yes	In a typical calendar week how many periods are you scheduled to teach physics?
BTBGSUB9	Yes	In a typical calendar week how many periods are you scheduled to teach other subjects?
BTBGTSK1	Yes	In a typical calendar week how many periods are you scheduled to perform student supervision?
BTBGTSK2	Yes	In a typical calendar week how many periods are you scheduled to perform student counseling/appraisal?
BTBGTSK3	Yes	In a typical calendar week how many periods are you scheduled to perform administrative duties?
BTBGTSK4	Yes	In a typical calendar week how many periods are you scheduled to perform individual curriculum planning?
BTBGTSK5	Yes	In a typical calendar week how many periods are you scheduled to perform cooperative curriculum planning?
BTBGTSK6	Yes	In a typical calendar week how many periods are you scheduled to perform other non-student contact time?
BTBGTSK7	No	In a typical calendar week how many periods are you scheduled to perform other tasks?
BTBGACT1	Yes	How many hours outside the school day do you spend per week preparing or grading exams?
BTBGACT2	Yes	How many hours outside the school day do you spend per week grading other work?
BTBGACT3	Yes	How many hours outside the school day do you spend per week planning lessons?
BTBGACT4	Yes	How many hours outside the school day do you spend per week meeting with students?
BTBGACT5	Yes	How many hours outside the school day do you spend per week meeting with parents?
BTBGACT6	Yes	How many hours outside the school day do you spend per week in professional development?
BTBGACT7	Yes	How many hours outside the school day do you spend per week keeping records?
BTBGACT8	Yes	How many hours outside the school day do you spend per week on administrative tasks?
BTBGACT9	No	How many hours outside the school day do you spend per week on other activities?
BTBGALTO	No	How many hours per week do you normally spend on your teaching activities altogether?
BTBGMEET	Yes	How often do you meet with other teachers to discuss curriculum or teaching issues?
BTBGINF1	Yes	How much influence do you have on subject matter to be taught?
BTBGINF2	Yes	How much influence do you have on textbooks to be used?
BTBGINF3	Yes	How much influence do you have on the amount of money to be spent on supplies?
BTBGINF4	Yes	How much influence do you have on what supplies are purchased?
BTBMIMP1	Yes	To be good in mathematics how important is it to remember formulas and procedures?
BTBMIMP2	Yes	To be good in mathematics how important is it to think in a sequential & procedural manner?
BTBMIMP3	Yes	To be good in mathematics how important is it to understand mathematical concepts?
BTBMIMP4	Yes	To be good in mathematics how important is it to think creatively?
BTBMIMP5	Yes	To be good in mathematics how important is it to understand real world use?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 2 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBMIMP6	Yes	TQM2A-11F	To be good in mathematics how important is it to be able to provide reasons to support solutions?
BTBMAGR1	Yes	TQM2A-12A	Mathematics is primarily an abstract subject.
BTBMAGR2	Yes	TQM2A-12B	Mathematics is primarily a formal way of representing the real world.
BTBMAGR3	Yes	TQM2A-12C	Mathematics is primarily a practical and structured guide for addressing real situations.
BTBGAGR4	Yes	TQM2A-12D	If students have difficulty they should be given more practice by themselves.
BTBMAGR5	Yes	TQM2A-12E	Some students have a natural talent for mathematics and others do not.
BTBMAGR6	Yes	TQM2A-12F	More than one representation should be used in teaching a mathematics topic.
BTBMAGR7	Yes	TQM2A-12G	Mathematics should be learned as sets of algorithms that cover all possibilities.
BTBMAGR8	Yes	TQM2A-12H	Basic computational skills are sufficient for teaching primary school mathematics.
BTBMAGR9	Yes	TQM2A-12I	A liking for and understanding of students are essential for teaching science.
BTBMFAM1	Yes	TQM2A-13A	How familiar are you with the <national curriculum guide for mathematics>?
BTBMFAM2	Yes	TQM2A-13B	How familiar are you with the <regional curriculum guide for mathematics>?
BTBGFAM3	Yes	TQM2A-13C	How familiar are you with the <school curriculum guide>?
BTBGFAM4	Yes	TQM2A-13D	How familiar are you with the <national examination specifications>?
BTBGFAM5	Yes	TQM2A-13E	How familiar are you with the <regional examination specifications>?
BTBMFAM6	Yes	TQM2A-13F	How familiar are you with the <national pedagogy guide for mathematics>?
BTBMFAM7	Yes	TQM2A-13G	How familiar are you with the <regional pedagogy guide for mathematics>?
BTBMFP01	No	TQM2A-14A	How well prepared do you feel you are to teach fractions, decimals and percentages?
BTBMFP02	No	TQM2A-14B	How well prepared do you feel you are to teach ratios and proportions?
BTBMFP03	No	TQM2A-14C	How well prepared do you feel you are to teach measurement?
BTBMFP04	No	TQM2A-14D	How well prepared do you feel you are to teach perimeter, area and volume?
BTBMFP05	No	TQM2A-14E	How well prepared do you feel you are to teach geometric figures - definitions and properties?
BTBMFP06	No	TQM2A-14F	How well prepared do you feel you are to teach geometric figures - symmetry, motions....?
BTBMFP07	No	TQM2A-14G	How well prepared do you feel you are to teach coordinate geometry?
BTBMFP08	No	TQM2A-14H	How well prepared do you feel you are to teach algebraic representation?
BTBMFP09	No	TQM2A-14I	How well prepared do you feel you are to teach how to evaluate operations on algebraic expressions?
BTBMFP10	No	TQM2A-14J	How well prepared do you feel you are to teach solving linear equations and inequalities?
BTBMFP11	No	TQM2A-14K	How well prepared do you feel you are to teach representation and interpretation of data?
BTBMFP12	No	TQM2A-14L	How well prepared do you feel you are to teach simple probabilities?
BTBGEDUC	Yes	TQM2A-15	What is the highest level of formal education you have completed?
BTBGTRAC	No	TQM2A-16A	Do you have a teacher training certificate?
BTBGYETR	No	TQM2A-16B	How many years of pre-service teacher training have you had?
BTBGPTRR	No	TQM2A-16C	If you have had pre-service teacher training, did you begin this training in secondary?
BTBGCMA5	No	TQM2A-17	I do not have a BA or equivalent?
BTBGCMA1	No	TQM2A-17A	While studying to obtain your BA, was your major area of study mathematics?
BTBGCMA2	No	TQM2A-17B	While studying to obtain your BA, was your major area of study biology?
BTBGCMA3	No	TQM2A-17C	While studying to obtain your BA, was your major area of study physics?
BTBGCMA4	No	TQM2A-17D	While studying to obtain your BA, was your major area of study chemistry?
BTBGCMA5	No	TQM2A-17E	While studying to obtain your BA, was your major area of study education?
BTBGCMA6	No	TQM2A-17F	While studying to obtain your BA, was your major area of study mathematics education?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 3 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBGCMA7	No	TQM2A-17G	While studying to obtain your BA, was your major area of study science education?
BTBGCMA8	No	TQM2A-17H	While studying to obtain your BA, was your major area of study other?
BTBGMMA5	No	TQM2A-18	I do not have a master's degree?
BTBGMMA1	No	TQM2A-18A	If you have a master's degree, was your major area of study mathematics?
BTBGMMA2	No	TQM2A-18B	If you have a master's degree, was your major area of study biology?
BTBGMMA3	No	TQM2A-18C	If you have a master's degree, was your major area of study physics?
BTBGMMA4	No	TQM2A-18D	If you have a master's degree, was your major area of study chemistry?
BTBGMMA5	No	TQM2A-18E	If you have a master's degree, was your major area of study education?
BTBGMMA6	No	TQM2A-18F	If you have a master's degree, was your major area of study mathematics education?
BTBGMMA7	No	TQM2A-18G	If you have a master's degree, was your major area of study science education?
BTBGMMA8	No	TQM2A-18H	If you have a master's degree, was your major area of study other?
BTBGCARE	Yes	TQM2A-19	Was teaching your first choice as a career when beginning university?
BTBGCCHNG	Yes	TQM2A-20	Would you change to another career if you had the opportunity?
BTBGSOAP	Yes	TQM2A-21	Do you think that society appreciates your work?
BTBGSTAP	Yes	TQM2A-22	Do you think your students appreciate your work?
BTBGBOOK	Yes	TQM2A-23	Approximately how many books are in your home?
BTBMB0Y	Yes	TQM2B-01A	How many boys are in your class?
BTBMBGIRL	Yes	TQM2B-01B	How many girls are in your class?
BTBMSMEC	No	TQM2B-02	What subject matter do you emphasize most in your mathematics class?
BTBMTIME	Yes	TQM2B-03	How many minutes per week do you teach mathematics to your class?
BTBMTXBK	Yes	TQM2B-04A	Do you use a textbook in teaching mathematics to your class?
BTBMTXBR	No	TQM2B-04B	If yes to 4A, what percentage of your teaching time is based on the text?
BTBMCUDL	No	TQM2B-05	Do students in your mathematics class have calculators available to use during mathematics lessons?
BTBMMWEC	No	TQM2B-06	To what extent are the students permitted to use calculators during math lessons?
BTBMCAL1	Yes	TQM2B-07A	How often do your students use calculators for checking answers?
BTBMCAL2	Yes	TQM2B-07B	How often do your students use calculators for tests?
BTBMCAL3	Yes	TQM2B-07C	How often do your students use calculators for routine computation?
BTBMCAL4	Yes	TQM2B-07D	How often do your students use calculators for solving complex problems?
BTBMCAL5	Yes	TQM2B-07E	How often do your students use calculators for exploring number concepts?
BTBMCOM1	No	TQM2B-08A	Do the students in your class have computers available to use in the classroom?
BTBMCOM2	No	TQM2B-08B	Do the students in your class have computers available to use in other instructional rooms?
BTBMINT1	No	TQM2B-08C	If computers are available, do any of the computers have access to the internet?
BTBMINT2	No	TQM2B-08D	If computers are available, do you use the internet for instructional/educational purposes?
BTBMSRC1	Yes	TQM2B-09A	What is your main source when deciding which topics to teach?
BTBMSRC2	Yes	TQM2B-09B	What is your main source when deciding how to present a topic?
BTBMSRC3	Yes	TQM2B-09C	What is your main source when selecting practice exercises?
BTBMSRC4	Yes	TQM2B-09D	What is your main source when selecting exercises for assessment?
BTBMASK1	No	TQM2B-10A	How often do you ask students to explain reasoning behind an idea?
BTBMASK2	No	TQM2B-10B	How often do you ask students to use tables charts or graphs?
BTBMASK3	No	TQM2B-10C	How often do you ask students to work on problems with no obvious method of solution?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 4 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBMASK4	No	TQM2B-10D	How often do you ask students to use computers?
BTBMASK5	No	TQM2B-10E	How often do you ask students to write equations to represent relationships?
BTBMASK6	No	TQM2B-10F	How often do you ask students to practice computational skills?
BTBMASK7	No	TQM2B-10G	How often do you ask students to use graphing calculators?
BTBMLES1	No	TQM2B-11A	In mathematics lessons how often do students work individually without assistance?
BTBMLES2	No	TQM2B-11B	In mathematics lessons how often do students work individually with assistance?
BTBMLES3	No	TQM2B-11C	In mathematics lessons how often do students work as a class with teacher leading?
BTBMLES4	No	TQM2B-11D	In mathematics lessons how often do students work as a class with students responding to each other?
BTBMLES5	No	TQM2B-11E	In mathematics lessons how often do students work in pairs without assistance?
BTBMLES6	No	TQM2B-11F	In mathematics lessons how often do students work in pairs with assistance?
BTBMACT1	No	TQM2B-12A	In a typical month of lessons, what percentage of time is spent on administrative tasks?
BTBMACT2	No	TQM2B-12B	In a typical month of lessons, what percentage of time is spent on homework review?
BTBMACT3	No	TQM2B-12C	In a typical month of lessons, what percentage of time is spent on lecture-style presentation by the teacher?
BTBMACT4	No	TQM2B-12D	In a typical month of lessons, what percentage of time is spent on teacher-guided student practice?
BTBMACT5	No	TQM2B-12E	In a typical month of lessons, what percentage of time is spent on re-teaching and clarification?
BTBMACT6	No	TQM2B-12F	In a typical month of lessons, what percentage of time is spent on student independent practice?
BTBMACT7	No	TQM2B-12G	In a typical month of lessons, what percentage of time is spent on tests and quizzes?
BTBMACT8	No	TQM2B-12H	In a typical month of lessons, what percentage of time is spent on other?
BTBMTB01	No	TQM2B-13A01A	Whole numbers was taught before this year.
BTBMTT01	No	TQM2B-13A01B	How many periods was whole numbers taught this year, if at all?
BTBMNT01	No	TQM2B-13A01C	I do not know when whole numbers was taught.
BTBMTB02	No	TQM2B-13A02A	Understanding and representing common fractions was taught before this year.
BTBMTT02	No	TQM2B-13A02B	How many periods was understanding and representing common fractions taught this year, if at all?
BTBMNT02	No	TQM2B-13A02C	I do not know when understanding and representing common fractions was taught.
BTBMTB03	No	TQM2B-13A03A	Computations with common fractions was taught before this year.
BTBMTT03	No	TQM2B-13A03B	How many periods was computations with common fractions taught this year, if at all?
BTBMNT03	No	TQM2B-13A03C	I do not know when computations with common fractions was taught.
BTBMTB04	No	TQM2B-13A04A	Understanding and representing decimal fractions was taught before this year.
BTBMTT04	No	TQM2B-13A04B	How many periods was understanding and representing decimal fractions taught this year, if at all?
BTBMNT04	No	TQM2B-13A04C	I do not know when understanding and representing decimal fractions was taught.
BTBMTB05	No	TQM2B-13A05A	Computations with decimal fractions was taught before this year.
BTBMTT05	No	TQM2B-13A05B	How many periods was computations with decimal fractions taught this year, if at all?
BTBMNT05	No	TQM2B-13A05C	I do not know when computations with decimal fractions was taught.
BTBMTB06	No	TQM2B-13A06A	Relationships between common and decimal fractions was taught before this year.
BTBMTT06	No	TQM2B-13A06B	How many periods was relationships between common and decimal fractions taught this year, if at all?
BTBMNT06	No	TQM2B-13A06C	I do not know when relationships between common and decimal fractions was taught.
BTBMTB07	No	TQM2B-13A07A	Rounding was taught before this year.
BTBMTT07	No	TQM2B-13A07B	How many periods was rounding taught this year, if at all?
BTBMNT07	No	TQM2B-13A07C	I do not know when rounding was taught.
BTBMTB08	No	TQM2B-13A08A	Estimating was taught before this year.

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 5 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBMTT08	No	TQM2B-13A08B	How many periods was estimating taught this year, if at all?
BTBMTT08	No	TQM2B-13A08C	I do not know when estimating was taught.
BTBMTB09	No	TQM2B-13A09A	Number lines was taught before this year.
BTBMTT09	No	TQM2B-13A09B	How many periods was number lines taught this year, if at all?
BTBMTT09	No	TQM2B-13A09C	I do not know when number lines was taught.
BTBMTB10	No	TQM2B-13A10A	Computations with percentages was taught before this year.
BTBMTT10	No	TQM2B-13A10B	How many periods was computations with percentages taught this year, if at all?
BTBMTT10	No	TQM2B-13A10C	I do not know when computations with percentages was taught.
BTBMTB11	No	TQM2B-13A11A	Simple computations with negative numbers was taught before this year.
BTBMTT11	No	TQM2B-13A11B	How many periods was simple computations with negative numbers taught this year, if at all?
BTBMTT11	No	TQM2B-13A11C	I do not know when simple computations with negative numbers was taught.
BTBMTB12	No	TQM2B-13A12A	Square roots was taught before this year.
BTBMTT12	No	TQM2B-13A12B	How many periods was square roots taught this year, if at all?
BTBMTT12	No	TQM2B-13A12C	I do not know when square roots was taught.
BTBMTB13	No	TQM2B-13B13A	Units of measurement was taught before this year.
BTBMTT13	No	TQM2B-13B13B	How many periods was units of measurement taught this year, if at all?
BTBMTT13	No	TQM2B-13B13C	I do not know when units of measurements was taught.
BTBMTB14	No	TQM2B-13B14A	Reading measurement instruments was taught before this year.
BTBMTT14	No	TQM2B-13B14B	How many periods was reading measurement instruments taught this year, if at all?
BTBMTT14	No	TQM2B-13B14C	I do not know when reading measurement instruments was taught.
BTBMTB15	No	TQM2B-13B15A	Estimates of measurement was taught before this year.
BTBMTT15	No	TQM2B-13B15B	How many periods was estimates of measurement taught this year, if at all?
BTBMTT15	No	TQM2B-13B15C	I do not know when estimates of measurement was taught.
BTBMTB16	No	TQM2B-13B16A	Perimeter and area of simple shapes was taught before this year.
BTBMTT16	No	TQM2B-13B16B	How many periods was perimeter and area of simple shapes taught this year, if at all?
BTBMTT16	No	TQM2B-13B16C	I do not know when perimeter and area of simple shapes was taught.
BTBMTB17	No	TQM2B-13B17A	Perimeter and area of combined shapes was taught before this year.
BTBMTT17	No	TQM2B-13B17B	How many periods was perimeter and area of combined shapes taught this year, if at all?
BTBMTT17	No	TQM2B-13B17C	I do not know when perimeter and area of combined shapes was taught.
BTBMTB18	No	TQM2B-13B18A	Volume of rectangular solids was taught before this year.
BTBMTT18	No	TQM2B-13B18B	How many periods was volume of rectangular solids taught this year, if at all?
BTBMTT18	No	TQM2B-13B18C	I do not know when volume of rectangular solids was taught.
BTBMTB19	No	TQM2B-13C19A	Cartesian coordinates was taught before this year.
BTBMTT19	No	TQM2B-13C19B	How many periods was Cartesian coordinates taught this year, if at all?
BTBMTT19	No	TQM2B-13C19C	I do not know when Cartesian coordinates was taught.
BTBMTB20	No	TQM2B-13C20A	Coordinates of points was taught before this year.
BTBMTT20	No	TQM2B-13C20B	How many periods was coordinates of points taught this year, if at all?
BTBMTT20	No	TQM2B-13C20C	I do not know when coordinates of points was taught.
BTBMTB21	No	TQM2B-13C21A	Simple 2D geometry was taught before this year.
BTBMTT21	No	TQM2B-13C21B	How many periods was simple 2D geometry taught this year, if at all?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 6 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBMT21	No	TQM2B-13C21C	I do not know when simple 2D geometry was taught.
BTBMT22	No	TQM2B-13C22A	Congruence and similarity was taught before this year.
BTBMT22	No	TQM2B-13C22B	How many periods was congruence and similarity taught this year, if at all?
BTBMT23	No	TQM2B-13C22C	I do not know when congruence and similarity was taught.
BTBMT23	No	TQM2B-13C23A	Symmetry and transformations was taught before this year.
BTBMT23	No	TQM2B-13C23B	How many periods was symmetry and transformations taught this year, if at all?
BTBMT23	No	TQM2B-13C23C	I do not know when symmetry and transformations was taught.
BTBMT24	No	TQM2B-13C24A	Visualization of 3D shapes was taught before this year.
BTBMT24	No	TQM2B-13C24B	How many periods was visualization of 3D shapes taught this year, if at all?
BTBMT24	No	TQM2B-13C24C	I do not know when visualization of 3D shapes was taught.
BTBMT25	No	TQM2B-13D25A	Scales applied to maps and models was taught before this year.
BTBMT25	No	TQM2B-13D25B	How many periods was scales applied to maps and models taught this year, if at all?
BTBMT25	No	TQM2B-13D25C	I do not know when scales applied to maps and models was taught.
BTBMT26	No	TQM2B-13D26A	Concepts of ratio and proportion was taught before this year.
BTBMT26	No	TQM2B-13D26B	How many periods was concepts of ratio and proportion taught this year, if at all?
BTBMT26	No	TQM2B-13D26C	I do not know when concepts of ratio and proportion was taught.
BTBMT27	No	TQM2B-13E27A	Number patterns was taught before this year.
BTBMT27	No	TQM2B-13E27B	How many periods was number patterns taught this year, if at all?
BTBMT27	No	TQM2B-13E27C	I do not know when number patterns was taught.
BTBMT28	No	TQM2B-13E28A	Simple algebraic expressions was taught before this year.
BTBMT28	No	TQM2B-13E28B	How many periods was simple algebraic expressions taught this year, if at all?
BTBMT28	No	TQM2B-13E28C	I do not know when simple algebraic expressions was taught.
BTBMT29	No	TQM2B-13E29A	Representing situations algebraically was taught before this year.
BTBMT29	No	TQM2B-13E29B	How many periods was representing situations algebraically taught this year, if at all?
BTBMT29	No	TQM2B-13E29C	I do not know when representing situations algebraically was taught.
BTBMT30	No	TQM2B-13E30A	Solving simple equations was taught before this year.
BTBMT30	No	TQM2B-13E30B	How many periods was solving simple equations taught this year, if at all?
BTBMT30	No	TQM2B-13E30C	I do not know when solving simple equations was taught.
BTBMT31	No	TQM2B-13E31A	Solving simple inequalities was taught before this year.
BTBMT31	No	TQM2B-13E31B	How many periods was solving simple inequalities taught this year, if at all?
BTBMT31	No	TQM2B-13E31C	I do not know when solving simple inequalities was taught.
BTBMT32	No	TQM2B-13F32A	Representation and interpretation of data was taught before this year.
BTBMT32	No	TQM2B-13F32B	How many periods was representation and interpretation of data taught this year, if at all?
BTBMT32	No	TQM2B-13F32C	I do not know when representation and interpretation of data was taught.
BTBMT33	No	TQM2B-13F33A	Arithmetic mean was taught before this year.
BTBMT33	No	TQM2B-13F33B	How many periods was arithmetic mean taught this year, if at all?
BTBMT33	No	TQM2B-13F33C	I do not know when arithmetic mean was taught.
BTBMT34	No	TQM2B-13F34A	Simple probabilities was taught before this year.
BTBMT34	No	TQM2B-13F34B	How many periods was simple probabilities taught this year, if at all?
BTBMT34	No	TQM2B-13F34C	I do not know when simple probabilities was taught.

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 7 of 8)

Variable Name	Available In 1995	Mathematics Teacher Questionnaire Location	Question
BTBMLM01	Yes	TQM2B-14A	Is your teaching limited by students with different academic abilities?
BTBMLM02	Yes	TQM2B-14B	Is your teaching limited by students from a wide range of backgrounds?
BTBMLM03	Yes	TQM2B-14C	Is your teaching limited by students with special needs?
BTBMLM04	Yes	TQM2B-14D	Is your teaching limited by uninterested students?
BTBMLM05	Yes	TQM2B-14E	Is your teaching limited by disruptive students?
BTBMLM06	Yes	TQM2B-14F	Is your teaching limited by parents interested in their children's progress?
BTBMLM07	Yes	TQM2B-14G	Is your teaching limited by parents uninterested in their children's progress?
BTBMLM08	Yes	TQM2B-14H	Is your teaching limited by shortage of computer hardware?
BTBMLM09	Yes	TQM2B-14I	Is your teaching limited by shortage of computer software?
BTBMLM10	Yes	TQM2B-14J	Is your teaching limited by shortage of other instructional equipment for student use?
BTBMLM11	Yes	TQM2B-14K	Is your teaching limited by shortage of equipment for demonstrations?
BTBMLM12	Yes	TQM2B-14L	Is your teaching limited by inadequate physical facilities?
BTBMLM13	Yes	TQM2B-14M	Is your teaching limited by high student/teacher ratio?
BTBMLM14	Yes	TQM2B-14N	Is your teaching limited by low morale among fellow teachers/administrators?
BTBMLM15	Yes	TQM2B-14O	Is your teaching limited by low morale among students?
BTBMLM16	Yes	TQM2B-14P	Is your teaching limited by threats to personal safety or students' safety?
BTBMHMW2	No	TQM2B-15	How often do you assign mathematics homework?
BTBMHWMA	No	TQM2B-16	How many minutes of homework do you usually assign?
BTBMWKBR	No	TQM2B-17A	How often do you assign worksheets for homework?
BTBMPROR	No	TQM2B-17B	How often do you assign textbook problems for homework?
BTBMRER	No	TQM2B-17C	How often do you assign reading for homework?
BTBMWRIR	No	TQM2B-17D	How often do you assign writing for homework?
BTBMDATR	No	TQM2B-17E	How often do you assign small investigations for homework?
BTBMIEXR	No	TQM2B-17F	How often do you assign long term individual projects for homework?
BTBMGEXR	No	TQM2B-17G	How often do you assign long term small group projects for homework?
BTBMFINR	No	TQM2B-17H	How often do you have students find uses of the content for homework?
BTBMORAR	No	TQM2B-17I	How often do you have students prepare oral reports for homework?
BTBMJORR	No	TQM2B-17J	How often do you assign journals for homework?
BTBMVHNA	No	TQM2B-18	I do not assign written homework
BTBMVHR1	No	TQM2B-18A	How often do you record whether or not homework was completed?
BTBMVHR2	No	TQM2B-18B	How often do you collect correct and keep homework assignments?
BTBMVHR3	No	TQM2B-18C	How often do you collect correct and return homework assignments?
BTBMVHR4	No	TQM2B-18D	How often do you give feedback on homework to whole class?
BTBMVHR5	No	TQM2B-18E	How often do you have students correct their own homework assignments in class?
BTBMVHR6	No	TQM2B-18F	How often do you have students exchange homework assignments and correct them?
BTBMVHR7	No	TQM2B-18G	How often do you use homework as a basis for class discussion?
BTBMVHR8	No	TQM2B-18H	How often do you use homework to contribute towards students' grades?
BTBMWGT1	No	TQM2B-19A	In assessment how much weight do you give standardized test produced outside the school?
BTBMWGT2	No	TQM2B-19B	In assessment how much weight do you give teacher-made open-ended tests?
BTBMWGT3	No	TQM2B-19C	In assessment how much weight do you give teacher-made multiple-choice tests?

Table S1.3 Index of International Background Variables for the TIMSS 1999 Mathematics Teacher Questionnaire (part 8 of 8)

Mathematics Teacher Questionnaire			
Variable Name	Available In 1995	Location	Question
BTBMWGT4	No	TQM2B-19D	In assessment how much weight do you give homework assignments?
BTBMWGT5	No	TQM2B-19E	In assessment how much weight do you give laboratory exercises?
BTBMWGT6	No	TQM2B-19F	In assessment how much weight do you give observations of students?
BTBMWGT7	No	TQM2B-19G	In assessment how much weight do you give responses of students in class?
BTBGASS1	No	TQM2B-20A	How often do you use assessment information to provide grades for students?
BTBGASS2	No	TQM2B-20B	How often do you use assessment information to provide feedback to students?
BTBGASS3	No	TQM2B-20C	How often do you use assessment information to diagnose learning problems?
BTBGASS4	No	TQM2B-20D	How often do you use assessment information to report to parents?
BTBGASS5	No	TQM2B-20E	How often do you use assessment information to assign students to tracks?
BTBGASS6	No	TQM2B-20F	How often do you use assessment information to plan for future lessons?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 1 of 8)

Variable Name	Available In 1995	Science Teacher Questionnaire Location	Question
BTBGAGE	Yes	TQS2A-01	Teacher age
BTBGSEX	Yes	TQS2A-02	Teacher sex
BTBGTAUG	Yes	TQS2A-03	By the end of this year how many years will you have been teaching?
BTBGTOTL	Yes	TQS2A-04	In a typical calendar week, for how many single periods are you formally scheduled?
BTBMSUB1	Yes	TQS2A-05A	In a typical calendar week how many periods are you scheduled to teach mathematics?
BTBSSUB2	Yes	TQS2A-05B	In a typical calendar week how many periods are you scheduled to teach general science?
BTBSSUB3	Yes	TQS2A-05C	In a typical calendar week how many periods are you scheduled to teach physical science?
BTBSSUB4	Yes	TQS2A-05D	In a typical calendar week how many periods are you scheduled to teach earth science?
BTBSSUB5	Yes	TQS2A-05E	In a typical calendar week how many periods are you scheduled to teach life science?
BTBSSUB6	Yes	TQS2A-05F	In a typical calendar week how many periods are you scheduled to teach biology?
BTBSSUB7	Yes	TQS2A-05G	In a typical calendar week how many periods are you scheduled to teach chemistry?
BTBSSUB8	Yes	TQS2A-05H	In a typical calendar week how many periods are you scheduled to teach physics?
BTBSSUB9	Yes	TQS2A-05I	In a typical calendar week how many periods are you scheduled to teach other subjects?
BTBGTSK1	Yes	TQS2A-06A	In a typical calendar week how many periods are you scheduled to perform student supervision?
BTBGTSK2	Yes	TQS2A-06B	In a typical calendar week how many periods are you scheduled to perform student counseling/appraisal?
BTBGTSK3	Yes	TQS2A-06C	In a typical calendar week how many periods are you scheduled to perform administrative duties?
BTBGTSK4	Yes	TQS2A-06D	In a typical calendar week how many periods are you scheduled to perform individual curriculum planning?
BTBGTSK5	Yes	TQS2A-06E	In a typical calendar week how many periods are you scheduled to perform cooperative curriculum planning?
BTBGTSK6	Yes	TQS2A-06F	In a typical calendar week how many periods are you scheduled to perform other non-student contact time?
BTBGTSK7	No	TQS2A-06G	In a typical calendar week how many periods are you scheduled to perform other tasks?
BTBGACT1	Yes	TQS2A-07A	How many hours outside the school day do you spend per week preparing or grading exams?
BTBGACT2	Yes	TQS2A-07B	How many hours outside the school day do you spend per week grading other work?
BTBGACT3	Yes	TQS2A-07C	How many hours outside the school day do you spend per week planning lessons?
BTBGACT4	Yes	TQS2A-07D	How many hours outside the school day do you spend per week meeting with students?
BTBGACT5	Yes	TQS2A-07E	How many hours outside the school day do you spend per week meeting with parents?
BTBGACT6	Yes	TQS2A-07F	How many hours outside the school day do you spend per week in professional development?
BTBGACT7	Yes	TQS2A-07G	How many hours outside the school day do you spend per week keeping records?
BTBGACT8	Yes	TQS2A-07H	How many hours outside the school day do you spend per week on administrative tasks?
BTBGACT9	No	TQS2A-07I	How many hours outside the school day do you spend per week on other activities?
BTBGALTO	No	TQS2A-08	How many hours per week do you normally spend on your teaching activities altogether?
BTBGMEET	Yes	TQS2A-09	How often do you meet with other teachers to discuss curriculum or teaching issues?
BTBGINF1	Yes	TQS2A-10A	How much influence do you have on subject matter to be taught?
BTBGINF2	Yes	TQS2A-10B	How much influence do you have on textbooks to be used?
BTBGINF3	Yes	TQS2A-10C	How much influence do you have on the amount of money to be spent on supplies?
BTBGINF4	Yes	TQS2A-10D	How much influence do you have on what supplies are purchased?
BTBSIMP1	Yes	TQS2A-11A	To be good in science how important is it to remember formulas and procedures?
BTBSIMP2	Yes	TQS2A-11B	To be good in science how important is it to think in a sequential & procedural manner?
BTBSIMP3	Yes	TQS2A-11C	To be good in science how important is it to understand scientific concepts?
BTBSIMP4	Yes	TQS2A-11D	To be good in science how important is it to think creatively?
BTBSIMP5	Yes	TQS2A-11E	To be good in science how important is it to understand real world use?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 2 of 8)

Variable Name	Available In 1995	Science Teacher Questionnaire Location	Question
BTBSIMP6	Yes	TQS2A-11F	To be good in science how important is it to be able to provide reasons to support solutions?
BTBSAGR1	Yes	TQS2A-12A	Science is primarily an abstract subject.
BTBSAGR2	Yes	TQS2A-12B	Science is primarily a formal way of representing the real world.
BTBSAGR3	Yes	TQS2A-12C	Science is primarily a practical and structured guide for addressing real situations.
BTBSAGR4	Yes	TQS2A-12D	Some students have a natural talent for science and others do not.
BTBSAGR5	Yes	TQS2A-12E	It is important for teachers to give students prescriptive directions for doing science experiments.
BTBSAGR6	Yes	TQS2A-12F	Focusing on rules gives students the impression that the sciences are a set of procedures.
BTBSAGR7	Yes	TQS2A-12G	If students get into debates about ideas in sciences it can harm their learning.
BTBSAGR8	Yes	TQS2A-12H	Students see a science task as the same task when it is represented in two different ways.
BTBSAGR9	Yes	TQS2A-12I	A liking for and understanding of students are essential for teaching science.
BTBSFAM1	Yes	TQS2A-13A	How familiar are you with the <national curriculum guide for sciences>?
BTBSFAM2	Yes	TQS2A-13B	How familiar are you with the <regional curriculum guide for sciences>?
BTBGFAM3	Yes	TQS2A-13C	How familiar are you with the <school curriculum guide>?
BTBGFAM4	Yes	TQS2A-13D	How familiar are you with the <national examination specifications>?
BTBGFAM5	Yes	TQS2A-13E	How familiar are you with the <regional examination specifications>?
BTBSFAM6	Yes	TQS2A-13F	How familiar are you with the <national pedagogy guide for sciences>?
BTBSFAM7	Yes	TQS2A-13G	How familiar are you with the <regional pedagogy guide for sciences>?
BTBSFP01	No	TQS2A-14A	How well prepared do you feel you are to teach earth science-earth's features?
BTBSFP02	No	TQS2A-14B	How well prepared do you feel you are to teach earth science-the solar system?
BTBSFP03	No	TQS2A-14C	How well prepared do you feel you are to teach biology-structure and function?
BTBSFP04	No	TQS2A-14D	How well prepared do you feel you are to teach biology-diversity, structure and processes?
BTBSFP05	No	TQS2A-14E	How well prepared do you feel you are to teach chemistry-classification and structure?
BTBSFP06	No	TQS2A-14F	How well prepared do you feel you are to teach chemistry-chemical reactivity?
BTBSFP07	No	TQS2A-14G	How well prepared do you feel you are to teach physics-types of energy?
BTBSFP08	No	TQS2A-14H	How well prepared do you feel you are to teach physics-light?
BTBSFP09	No	TQS2A-14I	How well prepared do you feel you are to teach environmental and resource issues?
BTBSFP10	No	TQS2A-14J	How well prepared do you feel you are to teach scientific method and inquiry skills?
BTBGEDUC	Yes	TQS2A-15	What is the highest level of formal education you have completed?
BTBGTRAC	No	TQS2A-16A	Do you have a teacher training certificate?
BTBGYETR	No	TQS2A-16B	How many years of pre-service teacher training have you had?
BTBGRTR	No	TQS2A-16C	If you have had pre-service teacher training, did you begin this training in secondary?
BTBGCMA5	No	TQS2A-17	I do not have a BA or equivalent?
BTBGCMA1	No	TQS2A-17A	While studying to obtain your BA, was your major area of study mathematics?
BTBGCMA2	No	TQS2A-17B	While studying to obtain your BA, was your major area of study biology?
BTBGCMA3	No	TQS2A-17C	While studying to obtain your BA, was your major area of study physics?
BTBGCMA4	No	TQS2A-17D	While studying to obtain your BA, was your major area of study chemistry?
BTBGCMA5	No	TQS2A-17E	While studying to obtain your BA, was your major area of study education?
BTBGCMA6	No	TQS2A-17F	While studying to obtain your BA, was your major area of study mathematics education?
BTBGCMA7	No	TQS2A-17G	While studying to obtain your BA, was your major area of study science education?
BTBGCMA8	No	TQS2A-17H	While studying to obtain your BA, was your major area of study other?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 3 of 8)

Variable Name	Available In 1995	Science Teacher Questionnaire	
		Location	Question
BTBGMMA5	No	TQS2A-18	I do not have a master's degree?
BTBGMMA1	No	TQS2A-18A	If you have a master's degree, was your major area of study mathematics?
BTBGMMA2	No	TQS2A-18B	If you have a master's degree, was your major area of study biology?
BTBGMMA3	No	TQS2A-18C	If you have a master's degree, was your major area of study physics?
BTBGMMA4	No	TQS2A-18D	If you have a master's degree, was your major area of study chemistry?
BTBGMMA5	No	TQS2A-18E	If you have a master's degree, was your major area of study education?
BTBGMMA6	No	TQS2A-18F	If you have a master's degree, was your major area of study mathematics education?
BTBGMMA7	No	TQS2A-18G	If you have a master's degree, was your major area of study science education?
BTBGMMA8	No	TQS2A-18H	If you have a master's degree, was your major area of study other?
BTBGCARE	Yes	TQS2A-19	Was teaching your first choice as a career when beginning university or teacher education college?
BTBGGCHG	Yes	TQS2A-20	Would you change to another career if you had the opportunity?
BTBGSOAP	Yes	TQS2A-21	Do you think that society appreciates your work?
BTBGSTAP	Yes	TQS2A-22	Do you think your students appreciate your work?
BTBGBOOK	Yes	TQS2A-23	Approximately how many books are in your home?
BTBSBOY	Yes	TQS2B-01A	How many boys are in your class?
BTBSGIRL	Yes	TQS2B-01B	How many girls are in your class?
BTBSSMEC	No	TQS2B-02	What subject matter do you emphasize most in your science class?
BTBSTIME	Yes	TQS2B-03	How many minutes per week do you teach science to your class?
BTBSTXBK	Yes	TQS2B-04A	Do you use a textbook in teaching science to your class?
BTBSTXBR	No	TQS2B-04B	If yes to 4A, what percentage of your teaching time is based on the text?
BTBSCUDL	No	TQS2B-05	Do the students in your science class have calculators available to use during science lessons?
BTBSWCEP	No	TQS2B-06	To what extent are the students in your science class permitted to use calculators in science lessons?
BTBSCAL1	Yes	TQS2B-07A	How often do students in your science class use calculators for checking answers?
BTBSCAL2	Yes	TQS2B-07B	How often do students in your science class use calculators for tests and exams?
BTBSCAL3	Yes	TQS2B-07C	How often do students in your science class use calculators for routine computation?
BTBSCAL4	Yes	TQS2B-07D	How often do students in your science class use calculators for solving complex problems?
BTBSCAL5	Yes	TQS2B-07E	How often do students in your science class use calculators for exploring number concepts?
BTBSCOM1	No	TQS2B-08A	Do the students in your science class have computers available to use in the classroom?
BTBSCOM2	No	TQS2B-08B	Do the students in your science class have computers available to use in other instructional rooms?
BTBSINT1	No	TQS2B-08C	If computers are available, do any of the computers have access to the internet?
BTBSINT2	No	TQS2B-08D	If computers are available, do you use the internet for instructional/educational purposes?
BTBSSRC1	Yes	TQS2B-09A	What is your main source when deciding which topics to teach?
BTBSSRC2	Yes	TQS2B-09B	What is your main source when deciding how to present a topic?
BTBSSRC3	Yes	TQS2B-09C	What is your main source when selecting practice exercises?
BTBSSRC4	Yes	TQS2B-09D	What is your main source when selecting exercises for assessment?
BTBSASK1	No	TQS2B-10A	In your science lessons how often do you ask students to explain reasoning behind an idea?
BTBSASK2	No	TQS2B-10B	In your science lessons how often do you ask students to use tables charts or graphs?
BTBSASK3	No	TQS2B-10C	How often do you ask students to work on problems with no obvious method of solution?
BTBSASK4	No	TQS2B-10D	How often do you ask students to use computers?
BTBSASK5	No	TQS2B-10E	How often do you ask students to write explanations of what was observed and why?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 4 of 8)

Variable Name	Available In 1995	Science Teacher Questionnaire	
		Location	Question
BTBSASK6	No	TQS2B-10F	How often do you ask students to put events in order and give a reason?
BTBSASK7	No	TQS2B-10G	How often do you ask students to use graphing calculators to solve exercises or problems?
BTBSLES1	No	TQS2B-11A	In science lessons how often do students work individually without assistance?
BTBSLES2	No	TQS2B-11B	In science lessons how often do students work individually with assistance?
BTBSLES3	No	TQS2B-11C	In science lessons how often do students work as a class with teacher leading?
BTBSLES4	No	TQS2B-11D	In science lessons how often do students work as a class with students responding to each other?
BTBSLES5	No	TQS2B-11E	In science lessons how often do students work in pairs without assistance?
BTBSLES6	No	TQS2B-11F	In science lessons how often do students work in pairs with assistance?
BTBSAC01	No	TQS2B-12A	In a typical month of lessons, what percentage of time is spent on administrative tasks?
BTBSAC02	No	TQS2B-12B	In a typical month of lessons, what percentage of time is spent on homework review?
BTBSAC03	No	TQS2B-12C	In a typical month of lessons, what percentage of time is spent on lecture-style presentation by the teacher?
BTBSAC04	No	TQS2B-12D	In a typical month of lessons, what percentage of time is spent on teacher-guided student practice?
BTBSAC05	No	TQS2B-12E	In a typical month of lessons, what percentage of time is spent on re-teaching and clarification?
BTBSAC06	No	TQS2B-12F	In a typical month of lessons, what percentage of time is spent on student independent practice?
BTBSAC07	No	TQS2B-12G	In a typical month of lessons, what percentage of time is spent on tests and quizzes?
BTBSAC08	No	TQS2B-12H	In a typical month of lessons, what percentage of time is spent on teacher demonstration of experiments?
BTBSAC09	No	TQS2B-12I	In a typical month of lessons, what percentage of time is spent on students conducting experiments?
BTBSAC10	No	TQS2B-12J	In a typical month of lessons, what percentage of time is spent on other?
BTBSTB01	No	TQS2B-13A01A	The earth's physical features was taught before this year.
BTBSTT01	No	TQS2B-13A01B	How many periods was the earth's physical features taught this year, if at all?
BTBSNT01	No	TQS2B-13A01C	I do not know when the earth's physical features was taught.
BTBSTB02	No	TQS2B-13A02A	The earth's atmosphere was taught before this year.
BTBSTT02	No	TQS2B-13A02B	How many periods was the earth's atmosphere taught this year, if at all?
BTBSNT02	No	TQS2B-13A02C	I do not know when the earth's atmosphere was taught.
BTBSTB03	No	TQS2B-13A03A	The earth's processes and history was taught before this year.
BTBSTT03	No	TQS2B-13A03B	How many periods was the earth's processes and history taught this year, if at all?
BTBSNT03	No	TQS2B-13A03C	I do not know when the earth's processes and history was taught.
BTBSTB04	No	TQS2B-13A04A	The earth in the solar system and the universe was taught before this year.
BTBSTT04	No	TQS2B-13A04B	How many periods was the earth in the solar system and the universe taught this year, if at all?
BTBSNT04	No	TQS2B-13A04C	I do not know when the earth in the solar system and the universe was taught.
BTBSTB05	No	TQS2B-13B05A	The human body - structure and function was taught before this year.
BTBSTT05	No	TQS2B-13B05B	How many periods was the human body - structure and function taught this year, if at all?
BTBSNT05	No	TQS2B-13B05C	I do not know when the human body - structure and function was taught.
BTBSTB06	No	TQS2B-13B06A	The human bodily processes was taught before this year.
BTBSTT06	No	TQS2B-13B06B	How many periods was the human bodily processes taught this year, if at all?
BTBSNT06	No	TQS2B-13B06C	I do not know when the human bodily processes was taught.
BTBSTB07	No	TQS2B-13B07A	Human nutrition was taught before this year.
BTBSTT07	No	TQS2B-13B07B	How many periods was human nutrition taught this year, if at all?
BTBSNT07	No	TQS2B-13B07C	I do not know when human nutrition was taught.
BTBSTB08	No	TQS2B-13B08A	The biology of plant and animal life was taught before this year.

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 5 of 8)

Science Teacher Questionnaire			
Variable Name	Available In 1995	Location	Question
BTBSTT08	No	TQS2B-13B08B	How many periods was the biology of plant and animal life taught this year, if at all?
BTBSNT08	No	TQS2B-13B08C	I do not know when the biology of plant and animal life was taught.
BTBSTB09	No	TQS2B-13B09A	The interactions of living things was taught before this year.
BTBSTT09	No	TQS2B-13B09B	How many periods was the interactions of living things taught this year, if at all?
BTBSNT09	No	TQS2B-13B09C	I do not know when the interactions of living things was taught.
BTBSTB10	No	TQS2B-13B10A	Reproduction, genetics, evolution and speciation was taught before this year.
BTBSTT10	No	TQS2B-13B10B	How many periods was reproduction, genetics, evolution and speciation taught this year, if at all?
BTBSNT10	No	TQS2B-13B10C	I do not know when reproduction, genetics, evolution and speciation was taught.
BTBSTB11	No	TQS2B-13C11A	Classification of matter was taught before this year.
BTBSTT11	No	TQS2B-13C11B	How many periods was the classification of matter taught this year, if at all?
BTBSNT11	No	TQS2B-13C11C	I do not know when the classification of matter was taught.
BTBSTB12	No	TQS2B-13C12A	Structure of matter was taught before this year.
BTBSTT12	No	TQS2B-13C12B	How many periods was the structure of matter taught this year, if at all?
BTBSNT12	No	TQS2B-13C12C	I do not know when the structure of matter was taught.
BTBSTB13	No	TQS2B-13C13A	Chemical reactivity and transformations was taught before this year.
BTBSTT13	No	TQS2B-13C13B	How many periods was chemical reactivity and transformations taught this year, if at all?
BTBSNT13	No	TQS2B-13C13C	I do not know when chemical reactivity and transformations was taught.
BTBSTB14	No	TQS2B-13C14A	Energy and chemical change was taught before this year.
BTBSTT14	No	TQS2B-13C14B	How many periods was energy and chemical change taught this year, if at all?
BTBSNT14	No	TQS2B-13C14C	I do not know when energy and chemical change was taught.
BTBSTB15	No	TQS2B-13D15A	The physical properties of matter was taught before this year.
BTBSTT15	No	TQS2B-13D15B	How many periods was the physical properties of matter taught this year, if at all?
BTBSNT15	No	TQS2B-13D15C	I do not know when the physical properties of matter was taught.
BTBSTB16	No	TQS2B-13D16A	Subatomic particles was taught before this year.
BTBSTT16	No	TQS2B-13D16B	How many periods was subatomic particles taught this year, if at all?
BTBSNT16	No	TQS2B-13D16C	I do not know when subatomic particles was taught.
BTBSTB17	No	TQS2B-13D17A	Energy types was taught before this year.
BTBSTT17	No	TQS2B-13D17B	How many periods was energy types taught this year, if at all?
BTBSNT17	No	TQS2B-13D17C	I do not know when energy types was taught.
BTBSTB18	No	TQS2B-13D18A	Heat and temperature was taught before this year.
BTBSTT18	No	TQS2B-13D18B	How many periods was heat and temperature taught this year, if at all?
BTBSNT18	No	TQS2B-13D18C	I do not know when heat and temperature was taught.
BTBSTB19	No	TQS2B-13D19A	Wave phenomena was taught before this year.
BTBSTT19	No	TQS2B-13D19B	How many periods was wave phenomena taught this year, if at all?
BTBSNT19	No	TQS2B-13D19C	I do not know when wave phenomena was taught.
BTBSTB20	No	TQS2B-13D20A	Light was taught before this year.
BTBSTT20	No	TQS2B-13D20B	How many periods was light taught this year, if at all?
BTBSNT20	No	TQS2B-13D20C	I do not know when light was taught.
BTBSTB21	No	TQS2B-13D21A	Electricity and magnetism was taught before this year.
BTBSTT21	No	TQS2B-13D21B	How many periods was electricity and magnetism taught this year, if at all?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 6 of 8)

Science Teacher Questionnaire			
Variable Name	Available In 1995	Location	Question
BTBSNT21	No	TQS2B-13D21C	I do not know when electricity and magnetism was taught.
BTBSTB22	No	TQS2B-13D22A	Forces and motion was taught before this year.
BTBSTT22	No	TQS2B-13D22B	How many periods was forces and motion taught this year, if at all?
BTBSNT22	No	TQS2B-13D22C	I do not know when forces and motion was taught.
BTBSTB23	No	TQS2B-13E23A	Pollution was taught before this year.
BTBSTT23	No	TQS2B-13E23B	How many periods was pollution taught this year, if at all?
BTBSNT23	No	TQS2B-13E23C	I do not know when pollution was taught.
BTBSTB24	No	TQS2B-13E24A	Conservation of natural resources was taught before this year.
BTBSTT24	No	TQS2B-13E24B	How many periods was conservation of natural resources taught this year, if at all?
BTBSNT24	No	TQS2B-13E24C	I do not know when conservation of natural resources was taught.
BTBSTB25	No	TQS2B-13E25A	Food supply and production was taught before this year.
BTBSTT25	No	TQS2B-13E25B	How many periods was food supply and production taught this year, if at all?
BTBSNT25	No	TQS2B-13E25C	I do not know when food supply and production was taught.
BTBSTB26	No	TQS2B-13F26A	Scientific method was taught before this year.
BTBSTT26	No	TQS2B-13F26B	How many periods was scientific method taught this year, if at all?
BTBSNT26	No	TQS2B-13F26C	I do not know when scientific method was taught.
BTBSTB27	No	TQS2B-13F27A	Experimental design was taught before this year.
BTBSTT27	No	TQS2B-13F27B	How many periods was experimental design taught this year, if at all?
BTBSNT27	No	TQS2B-13F27C	I do not know when experimental design was taught.
BTBSTB28	No	TQS2B-13F28A	Scientific measurements was taught before this year.
BTBSTT28	No	TQS2B-13F28B	How many periods was scientific measurements taught this year, if at all?
BTBSNT28	No	TQS2B-13F28C	I do not know when scientific measurements was taught.
BTBSTB29	No	TQS2B-13F29A	Using scientific apparatus was taught before this year.
BTBSTT29	No	TQS2B-13F29B	How many periods was using scientific apparatus taught this year, if at all?
BTBSNT29	No	TQS2B-13F29C	I do not know when using scientific apparatus was taught.
BTBSTB30	No	TQS2B-13F30A	Gathering data was taught before this year.
BTBSTT30	No	TQS2B-13F30B	How many periods was gathering data taught this year, if at all?
BTBSNT30	No	TQS2B-13F30C	I do not know when gathering data was taught.
BTBSTB31	No	TQS2B-13F31A	Describing data was taught before this year.
BTBSTT31	No	TQS2B-13F31B	How many periods was describing data taught this year, if at all?
BTBSNT31	No	TQS2B-13F31C	I do not know when describing data was taught.
BTBSLM01	Yes	TQS2B-14A	Is your teaching limited by students with different academic abilities?
BTBSLM02	Yes	TQS2B-14B	Is your teaching limited by students from a wide range of backgrounds?
BTBSLM03	Yes	TQS2B-14C	Is your teaching limited by students with special needs?
BTBSLM04	Yes	TQS2B-14D	Is your teaching limited by uninterested students?
BTBSLM05	Yes	TQS2B-14E	Is your teaching limited by disruptive students?
BTBSLM06	Yes	TQS2B-14F	Is your teaching limited by parents interested in their children's progress?
BTBSLM07	Yes	TQS2B-14G	Is your teaching limited by parents uninterested in their children's progress?
BTBSLM08	Yes	TQS2B-14H	Is your teaching limited by shortage of computer hardware?
BTBSLM09	Yes	TQS2B-14I	Is your teaching limited by shortage of computer software?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 7 of 8)

Science Teacher Questionnaire			
Variable Name	Available In 1995	Location	Question
BTBSLM10	Yes	TQS2B-14J	Is your teaching limited by shortage of other instructional equipment for student use?
BTBSLM11	Yes	TQS2B-14K	Is your teaching limited by shortage of equipment for demonstrations?
BTBSLM12	Yes	TQS2B-14L	Is your teaching limited by inadequate physical facilities?
BTBSLM13	Yes	TQS2B-14M	Is your teaching limited by high student/teacher ratio?
BTBSLM14	Yes	TQS2B-14N	Is your teaching limited by low morale among fellow teachers/administrators?
BTBSLM15	Yes	TQS2B-14O	Is your teaching limited by low morale among students?
BTBSLM16	Yes	TQS2B-14P	Is your teaching limited by threats to personal safety or students' safety?
BTBSHMW2	No	TQS2B-15	How often do you assign science homework?
BTBSHWMA	No	TQS2B-16	How many minutes of homework do you usually assign?
BTBSWKBR	No	TQS2B-17A	How often do you assign worksheets for homework?
BTBSPROR	No	TQS2B-17B	How often do you assign textbook problems for homework?
BTBSREAR	No	TQS2B-17C	How often do you assign reading for homework?
BTBSWRIR	No	TQS2B-17D	How often do you assign writing for homework?
BTBSDATR	No	TQS2B-17E	How often do you assign small investigations for homework?
BTBSIEXR	No	TQS2B-17F	How often do you assign long term individual projects for homework?
BTBSGEXR	No	TQS2B-17G	How often do you assign long term small group projects for homework?
BTBSFINR	No	TQS2B-17H	How often do you have students find uses of the content for homework?
BTBSORAR	No	TQS2B-17I	How often do you have students prepare oral reports for homework?
BTBSJORR	No	TQS2B-17J	How often do you assign journals for homework?
BTBSWHNA	No	TQS2B-18	I do not assign written homework
BTBSWHR1	No	TQS2B-18A	How often do you record whether or not homework was completed?
BTBSWHR2	No	TQS2B-18B	How often do you collect correct and keep homework assignments?
BTBSWHR3	No	TQS2B-18C	How often do you collect correct and return homework assignments?
BTBSWHR4	No	TQS2B-18D	How often do you give feedback on homework to whole class?
BTBSWHR5	No	TQS2B-18E	How often do you have students correct their own homework assignments in class?
BTBSWHR6	No	TQS2B-18F	How often do you have students exchange homework assignments and correct them?
BTBSWHR7	No	TQS2B-18G	How often do you use homework as a basis for class discussion?
BTBSWHR8	No	TQS2B-18H	How often do you use homework to contribute towards students' grades?
BTBSWGT1	No	TQS2B-19A	In assessment how much weight do you give standardized tests produced outside the school?
BTBSWGT2	No	TQS2B-19B	In assessment how much weight do you give teacher-made open-ended tests?
BTBSWGT3	No	TQS2B-19C	In assessment how much weight do you give teacher-made multiple-choice tests?
BTBSWGT4	No	TQS2B-19D	In assessment how much weight do you give homework assignments?
BTBSWGT5	No	TQS2B-19E	In assessment how much weight do you give laboratory exercises?
BTBSWGT6	No	TQS2B-19F	In assessment how much weight do you give observations of students?
BTBSWGT7	No	TQS2B-19G	In assessment how much weight do you give responses of students in class?
BTBGASS1	No	TQS2B-20A	How often do you use assessment information to provide grades for students?
BTBGASS2	No	TQS2B-20B	How often do you use assessment information to provide feedback to students?
BTBGASS3	No	TQS2B-20C	How often do you use assessment information to diagnose learning problems?
BTBGASS4	No	TQS2B-20D	How often do you use assessment information to report to parents?
BTBGASS5	No	TQS2B-20E	How often do you use assessment information to assign students to tracks?

Table S1.4 Index of International Background Variables for the TIMSS 1999 Science Teacher Questionnaire (part 8 of 8)

Variable Name	Available In 1995	Science Teacher Questionnaire	
		Location	Question
BTBGASS6	No	TQS2B-20F	How often do you use assessment information to plan for future lessons?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 1 of 6)

School		
Variable Name	Available in 1995	Questionnaire Location Question
BCBGCOMM	Yes	In what type of community is your school located?
BCBGFTE1	Yes	How many principals are on the staff of your school? (in FTE)
BCBGFTE2	Yes	How many assistant principals are on the staff of your school? (in FTE)
BCBGFTE3	Yes	How many department heads are on the staff of your school? (in FTE)
BCBGFTE4	Yes	How many <classroom teachers> are on the staff of your school? (in FTE)
BCBGFTE5	Yes	How many teacher aides are on the staff of your school? in (FTE)
BCBGFTE6	Yes	How many laboratory technicians are on the staff of your school? (in FTE)
BCBGFTE7	Yes	How many learning specialists are on the staff of your school? (in FTE)
BCBGFTE8	Yes	How many other professional staff members are on the staff of your school? (in FTE)
BCBGFTTE	Yes	How many individual full-time <classroom teacher> are there in your school?
BCBGPTTE	Yes	How many individual part-time <classroom teachers> are there in your school?
BCBGTE5Y	Yes	What percentage of the <classroom teachers> have been at your school for 5 or more years?
BCBMTSA1	No	How long do students in your school typically stay with the mathematics teacher?
BCBSTSA2	No	How long do students in your school typically stay with the <general/integrated science> teacher?
BCBSTSA3	No	How long do students in your school typically stay with the <biology> teacher?
BCBSTSA4	No	How long do students in your school typically stay with the <chemistry> teacher?
BCBSTSA5	No	How long do students in your school typically stay with the <earth science> teacher?
BCBSTSA6	No	How long do students in your school typically stay with the <physics> teacher?
BCBGCOL1	Yes	Does your school have policy promoting cooperation and collaboration among teachers?
BCBGCOL2	Yes	Are teachers encouraged to share and discuss instructional ideas and materials?
BCBGCOL3	Yes	Do teachers in your school meet regularly to discuss instructional goals and issues?
BCBGAC01	Yes	As principal how many hours per month do you spend on hiring teachers?
BCBGAC02	Yes	As principal how many hours per month do you spend on representing school in community?
BCBGAC03	Yes	As principal how many hours per month do you spend on representing school at official meetings?
BCBGAC04	Yes	As principal how many hours per month do you spend on internal administrative tasks?
BCBGAC05	Yes	As principal how many hours per month do you spend on teaching?
BCBGAC06	Yes	As principal how many hours per month do you spend on giving demonstration lessons?
BCBGAC07	Yes	As principal how many hours per month do you spend discussing educational objectives w/ teachers?
BCBGAC08	Yes	As principal how many hours per month do you spend on initiating curriculum revision/planning?
BCBGAC09	Yes	As principal how many hours per month do you spend on talking with parents?
BCBGAC10	Yes	As principal how many hours per month do you spend on counseling/disciplining students?
BCBGAC11	Yes	How many hours per month do you spend responding to requests from state education officials ?
BCBGAC12	Yes	As principal how many hours per month do you spend on training teachers?
BCBGAC13	Yes	As principal how many hours per month do you spend on professional development activities?
BCBGAC14	Yes	As principal how many hours per month do you spend on other activities?
BCBGRP01	Yes	In your school who has primary responsibility for hiring teachers?
BCBGRP02	Yes	In your school who has primary responsibility for establishing disciplinary policies?
BCBGRP03	Yes	In your school who has primary responsibility for establishing student grading policies?
BCBGRP04	Yes	In your school who has primary responsibility for formulating the school budget?
BCBGRP05	Yes	In your school who has primary responsibility for purchasing supplies?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 2 of 6)

School Questionnaire			
Variable Name	Available in 1995	Location	Question
BCBGRP06	Yes	SCQ2-08F	In your school who has primary responsibility for placing students in classes?
BCBGRP07	Yes	SCQ2-08G	In your school who has primary responsibility for assigning teachers to classes?
BCBGRP08	Yes	SCQ2-08H	In your school who has primary responsibility for choosing textbooks?
BCBGRP09	Yes	SCQ2-08I	In your school who has primary responsibility for establishing homework policies?
BCBGRP10	Yes	SCQ2-08J	In your school who has primary responsibility for determining teacher salaries?
BCBGRP11	Yes	SCQ2-08K	In your school who has primary responsibility for establishing community relationships?
BCBGRP12	Yes	SCQ2-08L	In your school who has primary responsibility for communicating with students' families?
BCBGRP13	Yes	SCQ2-08M	In your school who has primary responsibility for determining course content?
BCBGRP14	Yes	SCQ2-08N	In your school who has primary responsibility for determining course offerings?
BCBGIF01	Yes	SCQ2-09A	How much influence does the <National Curriculum Council> have in determining curriculum?
BCBGIF02	Yes	SCQ2-09B	How much influence does the <National Subject Association> have in determining curriculum?
BCBGIF03	Yes	SCQ2-09C	How much influence does the <educational district> have in determining curriculum?
BCBGIF04	Yes	SCQ2-09D	How much influence does the <school governing board> have in determining curriculum?
BCBGIF05	Yes	SCQ2-09E	How much influence does the principal/head of school have in determining curriculum?
BCBGIF06	Yes	SCQ2-09F	How much influence do teachers collectively have in determining curriculum?
BCBGIF07	Yes	SCQ2-09G	How much influence do teachers of a subject have in determining curriculum?
BCBGIF08	Yes	SCQ2-09H	How much influence do individual teachers have in determining curriculum?
BCBGIF09	Yes	SCQ2-09I	How much influence do parents have in determining curriculum?
BCBGIF10	Yes	SCQ2-09J	How much influence do students have in determining curriculum?
BCBGIF11	Yes	SCQ2-09K	How much influence do church/religious groups have in determining curriculum?
BCBGIF12	Yes	SCQ2-09L	How much influence does business community have in determining curriculum?
BCBGIF13	Yes	SCQ2-09M	How much influence do textbook publishers have in determining curriculum?
BCBGIF14	Yes	SCQ2-09N	How much influence do external exams/standardized tests have in determining curriculum?
BCBGIF15	Yes	SCQ2-09O	How much influence do teacher unions have in determining curriculum?
BCBMCJRR	Yes	SCQ2-10A	Does your school have its own written statement of the mathematics content to be taught?
BCBSCJRR	Yes	SCQ2-10B	Does your school have its own written statement of the science content to be taught?
BCBMDVLP	No	SCQ2-11A	Has your school developed learning materials to address mathematics taught?
BCBSDVLP	No	SCQ2-11B	Has your school developed learning materials to address science taught?
BCBGST01	Yes	SCQ2-12A	Is your school's instructional capacity affected by inadequacy of instructional materials?
BCBGST02	Yes	SCQ2-12B	Is your school's instructional capacity affected by inadequacy of budget for supplies?
BCBGST03	Yes	SCQ2-12C	Is your school's instructional capacity affected by inadequacy of school buildings and grounds?
BCBGST04	Yes	SCQ2-12D	Is your school's instructional capacity affected by inadequacy of heating and lighting system?
BCBGST05	Yes	SCQ2-12E	Is your school's instructional capacity affected by inadequacy of instructional space?
BCBGST06	Yes	SCQ2-12F	Is your school's instructional capacity affected by inadequacy of equipment for handicapped pupils?
BCBMST07	Yes	SCQ2-12G	Is your school's instructional capacity affected by inadequacy of computers for maths instruction?
BCBMST08	Yes	SCQ2-12H	Is your school's instructional capacity affected by inadequacy of software for maths instruction?
BCBMST09	Yes	SCQ2-12I	Is your school's instructional capacity affected by inadequacy of calculators for maths instruction?
BCBMST10	Yes	SCQ2-12J	Is your school's capacity affected by inadequacy of library tools for maths instruction?
BCBMST11	Yes	SCQ2-12K	Is your school's capacity affected by inadequacy of A-V resources for maths instruction?
BCBSSST12	Yes	SCQ2-12L	Is your school's instructional capacity affected by inadequacy of science laboratory equipment?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 3 of 6)

School			
Variable Name	Available in 1995	Questionnaire Location	Question
BCBSST13	Yes	SCQ2-12M	Is your school's instructional capacity affected by inadequacy of computers for science instruction?
BCBSST14	Yes	SCQ2-12N	Is your school's instructional capacity affected by inadequacy of software for science instruction?
BCBSST15	Yes	SCQ2-12O	Is your school's capacity affected by inadequacy of calculators for science instruction?
BCBSST16	Yes	SCQ2-12P	Is your school's capacity affected by inadequacy of library tools relevant to science instruction?
BCBSST17	Yes	SCQ2-12Q	Is your school's capacity affected by inadequacy of A-V resources for science instruction?
BCBSST18	No	SCQ2-12R	Is your school's instructional capacity affected by inadequacy of teachers qualified to teach maths?
BCBSST19	No	SCQ2-12S	Is your school's capacity affected by inadequacy of teachers qualified to teach general/integrated?
BCBSST20	No	SCQ2-12T	Is your school's capacity affected by inadequacy of teachers qualified to teach biology?
BCBSST21	No	SCQ2-12U	Is your school's capacity affected by inadequacy of teachers qualified to teach chemistry?
BCBSST22	No	SCQ2-12V	Is your school's capacity affected by inadequacy of teachers qualified to teach earth science?
BCBSST23	No	SCQ2-12W	Is your school's capacity affected by inadequacy of teachers qualified to teach physics?
BCBGBENR	Yes	SCQ2-13A1	How many boys attend your school?
BCBGGENR	Yes	SCQ2-13A2	How many girls attend your school?
BCBGABST	Yes	SCQ2-13B	What percentage of students are absent on a typical day?
BCBGENDY	Yes	SCQ2-13C	What percentage of students who begin the year in your school also finish in your school?
BCBGTFNSF	Yes	SCQ2-13D	What percentage of students in your school transfer in after the beginning of school year?
BCBGUBER	Yes	SCQ2-14A1	How many boys are in upper grade?
BCBGUGER	Yes	SCQ2-14A2	How many girls are in upper grade?
BCBGUBRT	Yes	SCQ2-14B1	How many boys in upper grade are repeating the grade?
BCBGUGRT	Yes	SCQ2-14B2	How many girls in upper grade are repeating the grade?
BCBGUSIZ	Yes	SCQ2-14C	What is the approximate average class size in upper grade?
BCBGUMGR	Yes	SCQ2-14D	How many upper grade students are in multi-grade classrooms?
BCBGCOMP1	No	SCQ2-15A	What is the no of computers that can be used by students in u-grade for instructional activities?
BCBGCOMP2	No	SCQ2-15B	What is the no of computers (other than above) that can be used by u-grade teachers for teaching?
BCBGCOMP3	No	SCQ2-15C	What is the no of computers that can be used by either students or teachers for instructional purposes?
BCBGIACC	No	SCQ2-16	Does your school have Internet access for instructional/educational purposes?
BCBGACPL	No	SCQ2-16A	If your school have no access to Internet, is it planning to get Internet access?
BCBGACYE	No	SCQ2-16B	If your school is planning to get Internet access, when do you expect it to get Internet access?
BCBGNAC2	No	SCQ2-16C	If your school have access to Internet what percentage of the computers in Q15 have access to email?
BCBGNAC3	No	SCQ2-16D	If your school have access to Internet what percentage of the computers in Q15 have access to www?
BCBGWB1	No	SCQ2-16E	If your school have access to Internet, has it made information about the school available on www?
BCBGWB2	No	SCQ2-16F	If your school have access to Internet, has it made maths curriculum guidelines available on www?
BCBGWB3	No	SCQ2-16G	If your school have access to Internet, has it made science curriculum guidelines available on www?
BCBGWB4	No	SCQ2-16H	If your school have access to Internet, has it made maths instructional activities available on www?
BCBGWB5	No	SCQ2-16I	If your school have access to Internet has it made science instruction activities available on www?
BCBGUF01	No	SCQ2-17A1	How often does school administration/staff have to deal with u-grade students' being late at school?
BCBGUS01	No	SCQ2-17A2	To what extent does upper grade students' arrive late at school present a problem in your school?
BCBGUF02	No	SCQ2-17B1	How often does school administration or staff have to deal with u-grade students' absenteeism?
BCBGUS02	No	SCQ2-17B2	To what extent does u-grade students' unjustifiable absenteeism present a problem in your school?
BCBGUF03	No	SCQ2-17C1	How often does school administration/staff have to deal with u-grade students' skipping classes?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 4 of 6)

School			
Variable Name	Available in 1995	Questionnaire Location	Question
BCBGUS03	No	SCQ2-17C2	To what extent does upper grade students' skipping class periods present a problem in your school?
BCBGUF04	No	SCQ2-17D1	How often does school administration/staff have to deal with u-grade students' violating dress code?
BCBGUS04	No	SCQ2-17D2	To what extent does upper grade students' violating the dress code present a problem in your school?
BCBGUF05	No	SCQ2-17E1	How often does school administration/staff have to deal with class disturbance by u-grade pupils?
BCBGUS05	No	SCQ2-17E2	To what extent does classroom disturbance by upper grade students present a problem in your school?
BCBGUF06	No	SCQ2-17F1	How often does school administration or staff have to deal with cheating by upper grade students?
BCBGUS06	No	SCQ2-17F2	To what extent does cheating by upper grade students present a problem in your school?
BCBGUF07	No	SCQ2-17G1	How often does school administration/staff have to deal with use of profanity by u-grade students?
BCBGUS07	No	SCQ2-17G2	To what extent does profanity by upper grade students present a problem in your school?
BCBGUF08	No	SCQ2-17H1	How often does school administration or staff have to deal with vandalism by upper grade students?
BCBGUS08	No	SCQ2-17H2	To what extent does vandalism by upper grade students present a problem in your school?
BCBGUF09	No	SCQ2-17I1	How often does school administration or staff have to deal with theft by upper grade students?
BCBGUS09	No	SCQ2-17I2	To what extent does theft by upper grade students present a problem in your school?
BCBGUF10	No	SCQ2-17J1	How often does school administration/staff have to deal with intimidation of pupils by u-grade ones?
BCBGUS10	No	SCQ2-17J2	To what extent does u-grade students' intimidation of students by u-grade students in your school?
BCBGUF11	No	SCQ2-17K1	How often does administration/staff have to deal with injury to students caused by u-grade students?
BCBGUS11	No	SCQ2-17K2	To what extent does physical injury to students caused by u-grade students present a problem?
BCBGUF12	No	SCQ2-17L1	How often does administration/staff have to deal with intimidation of teachers by u-grade students?
BCBGUS12	No	SCQ2-17L2	To what extent does intimidation of teachers/staff by upper grade students present a problem?
BCBGUF13	No	SCQ2-17M1	How often does school administration have to deal with injury of staff caused by u-grade pupils?
BCBGUS13	No	SCQ2-17M2	To what extent does physical injury of staff caused by upper grade students present a problem?
BCBGUF14	No	SCQ2-17N1	How often does school administration have to deal with tobacco use/possession by u-grade students?
BCBGUS14	No	SCQ2-17N2	To what extent does tobacco use/possession by upper grade students present a problem in your school?
BCBGUF15	No	SCQ2-17O1	How often does school administration have to deal with alcohol use/possession by u-grade students?
BCBGUS15	No	SCQ2-17O2	To what extent does alcohol use/possession by upper grade students present a problem in your school?
BCBGUF16	No	SCQ2-17P1	How often does school administration have to deal with illegal drug use/possession by u-grade pupil?
BCBGUS16	No	SCQ2-17P2	To what extent does illegal drug use/possession by upper grade students present a problem?
BCBGUF17	No	SCQ2-17Q1	How often does school administration have to deal with weapon use/possession by u-grade students?
BCBGUS17	No	SCQ2-17Q2	To what extent does weapon use/possession by upper grade students present a problem in your school?
BCBGUF18	No	SCQ2-17R1	How often does school administration have to deal with sexual behavior by u-grade students?
BCBGUS18	No	SCQ2-17R2	To what extent does inappropriate sexual behavior by upper grade students present a problem?
BCBGUDY	Yes	SCQ2-18A	How many instructional days are in the school year for upper grade?
BCBGUFLW	Yes	SCQ2-18B	How many full instructional days are in the school week for upper grade?
BCBGUHF	Yes	SCQ2-18C	How many half instructional days are in the school week for upper grade?
BCBGUHW	Yes	SCQ2-18D	How many total hours are in the school week for upper grade?
BCBGUHW	Yes	SCQ2-18E	How many instructional hours are in the school week for upper grade?
BCBGDIV	Yes	SCQ2-19	Is the school week divided into instructional periods?
BCBGUPDW	Yes	SCQ2-19A	How many instructional periods are there in a week for upper grade?
BCBGUTMP	Yes	SCQ2-19B	How many minutes is a typical instructional period for upper grade?
BCBMODF1	No	SCQ2-20A	Does your school study similar contents at different levels for u-grade students in maths?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 5 of 6)

Variable Name	Available in 1995	School Questionnaire	
		Location	Question
BCBMODF2	No	SCQ2-20B	Does your school group by ability u-grade students in maths?
BCBMODF3	No	SCQ2-20C	Does your school provide enrichment activities for u-grade students in maths?
BCBMODF4	No	SCQ2-20D	Does your school provide remedial teaching for u-grade students in maths?
BCBMODF5	No	SCQ2-20E	Does your school provide classes that study different contents for u-grade students in maths?
BCBMUC3	Yes	SCQ2-20E1	How many courses that study different contents does your school have for u-grade students in maths?
BCBMUFC1	Yes	SCQ2-21A	How important is academic performance in selecting mathematics course of study for student?
BCBMUFC2	Yes	SCQ2-21B	How important are standardized tests in selecting mathematics course of study for student?
BCBMUFC3	Yes	SCQ2-21C	How important is entrance exam in selecting mathematics course of study for student?
BCBMUFC4	Yes	SCQ2-21D	How important is oral exam in selecting mathematics course of study for student?
BCBMUFC5	Yes	SCQ2-21E	How important are teacher recommendations in selecting mathematics course of study for student?
BCBMUFC6	Yes	SCQ2-21F	How important are parental wishes in selecting mathematics course of study for student?
BCBMUFC7	Yes	SCQ2-21G	How important are student wishes in selecting mathematics course of study for student?
BCBMUFC8	Yes	SCQ2-21H	How important are curricular requirements in selecting mathematics course of study for student?
BCBSODF1	No	SCQ2-22A	Does your school study similar contents at different levels for u-grade students in science?
BCBSODF2	No	SCQ2-22B	Does your school group by ability u-grade students in science?
BCBSODF3	No	SCQ2-22C	Does your school provide enrichment activities for u-grade students in science?
BCBSODF4	No	SCQ2-22D	Does your school provide remedial teaching for u-grade students in science?
BCBSODF5	No	SCQ2-22E	Does your school provide classes that study different contents for u-grade students in science?
BCBSUC3	Yes	SCQ2-22E1	How many courses that study different contents does your school have for u-grade students in science?
BCBSUFC1	Yes	SCQ2-23A	How important is academic performance in selecting science course of study for student?
BCBSUFC2	Yes	SCQ2-23B	How important are standardized tests in selecting science course of study for student?
BCBSUFC3	Yes	SCQ2-23C	How important is entrance exam in selecting science course of study for student?
BCBSUFC4	Yes	SCQ2-23D	How important is oral exam in selecting science course of study for student?
BCBSUFC5	Yes	SCQ2-23E	How important are teacher recommendations in selecting science course of study for student?
BCBSUFC6	Yes	SCQ2-23F	How important are parental wishes in selecting science course of study for student?
BCBSUFC7	Yes	SCQ2-23G	How important are student wishes in selecting science course of study for student?
BCBSUFC8	Yes	SCQ2-23H	How important are curricular requirements in selecting science course of study for student?
BCBGBS01	Yes	SCQ2-24A	In admitting students to your school do you consider residence in a particular area?
BCBGBS02	Yes	SCQ2-24B	In admitting students to your school do you consider student's academic performance?
BCBGBS03	Yes	SCQ2-24C	In admitting students to your school do you consider interview with student?
BCBGBS04	Yes	SCQ2-24D	In admitting students to your school do you consider interview with parent?
BCBGBS05	Yes	SCQ2-24E	In admitting students to your school is preference given to students with siblings in the school?
BCBGBS06	Yes	SCQ2-24F	In admitting students to your school is preference given according to date of application?
BCBGBS07	Yes	SCQ2-24G	In admitting students to your school do you consider recommendations of previous teachers?
BCBGBS08	Yes	SCQ2-24H	In admitting students to your school is preference given to students from a particular school?
BCBGBS09	Yes	SCQ2-24I	In admitting students to your school is preference given to children of former students?
BCBGBS10	Yes	SCQ2-24J	In admitting students to your school do you consider performance on a standardized test?
BCBGBS11	Yes	SCQ2-24K	In admitting students to your school do you consider performance on an entrance exam?
BCBGBS12	Yes	SCQ2-24L	In admitting students to your school do you consider performance on an oral exam?
BCBGBS13	Yes	SCQ2-24M	In admitting students to your school do you consider other factors?

Table S1.5 Index of International Background Variables for the TIMSS 1999 School Questionnaire (Part 6 of 6)

School			
Variable Name	Available in 1995	Questionnaire Location	Question
BCBGEP01	No	SCQ2-25A	Does your school expect parents to notify the school about their child's problems?
BCBGEP02	No	SCQ2-25B	Does your school expect parents to serve as teacher aids in the classroom?
BCBGEP03	No	SCQ2-25C	Does your school expect parents to raise funds for the school?
BCBGEP04	No	SCQ2-25D	Does your school expect parents to volunteer for school projects and programs?
BCBGEP05	No	SCQ2-25E	Does your school expect parents to be sure that their child completes his/her homework?
BCBGEP06	No	SCQ2-25F	Does your school expect parents to assist teachers on trips?
BCBGEP07	No	SCQ2-25G	Does your school expect parents to prepare their child's lunchbox?
BCBGEP08	No	SCQ2-25H	Does your school expect parents to patrol the grounds of the school to monitor student behavior?
BCBGEP09	No	SCQ2-25I	Does your school expect parents to serve on committees which select school personnel?
BCBGEP10	No	SCQ2-25J	Does your school expect parents to serve on committees which review school finances?

Section 1

Student Background Questionnaire
Integrated Science Version (SQ2)



Identification Label

School:

Class:

Student:

IEA Third International Mathematics and Science Study - Repeat

Student Questionnaire Main Survey

TIMSS Study Center
Boston College
Chestnut Hill, MA 02467
USA

(Institute Address)

TIMSS-R Ref.No. 98-0035
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TIMSS-R Ref.No. 98-0035

GENERAL DIRECTIONS

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

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

Some of the questions will be followed by a few possible choices indicated with a letter next to or below it. For these questions, circle the letter next to or below your choice as shown in Example 1.

Example 1

1. I attend school *Yes* *No*
(A) B

The letter "A" has been circled because you attend school.

If you decide to change your response to a question, put an "X" over your first choice and then put a circle around your new choice as shown in Example 2.

Example 2

1. I like ice cream *Strongly agree* *Agree* *Disagree* *Strongly disagree*
(A) ~~(B)~~ C D

For other questions you will be asked to write a number or date in the space provided in your booklet. For these questions, you may use words and numbers in your answers. When you write, please be sure that your handwriting is clear.

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BSBGBIRD
BSBGBIRM
BSBGBIRY

1. On what date were you born?

Write in the day, month and year.

< ____ day ____ month ____ year >

<NRC NOTE: USE STYLE APPROPRIATE TO YOUR COUNTRY AND GRADE LEVEL.>

BSBGSEX

2. Are you a girl or a boy?

Circle either A or B.

girl A

boy B

BSBGBRN1

3a. Were you born in <country> ?

Circle either A or B.

Yes A

No B

BSBGBRN2

3b. If you were not born in <country>, how old were you when you came to <country>?

Write in your age at the time.

I was _____ years old when I came to <country>.

BSBGLANG

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

Circle either A, B, or C.

always or almost always A

sometimes B

never C

5. During the week, how much time before or after school do you usually spend...

Circle one letter, A, B, C, D, or E, for each line.

		<i>No time</i>	<i>Less than 1 hour</i>	<i>1-2 hours</i>	<i>3-5 hours</i>	<i>More than 5 hours</i>
BSBMEXTR	a) taking <extra lessons/cramming school> in mathematics?	A	B	C	D	E
BSBSEXTR	b) taking <extra lessons/cramming school> in science?	A	B	C	D	E
BSBGCLUB	c) participating in science or mathematics clubs?	A	B	C	D	E
BSBGPAID	d) working at a paid job?	A	B	C	D	E

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

Circle one letter, A, B, C, D, or E, for each line.

		<i>No time</i>	<i>Less than 1 hour</i>	<i>1-2 hours</i>	<i>3-5 hours</i>	<i>More than 5 hours</i>
BSBGDAY1	a) watching television and videos	A	B	C	D	E
BSBGDAY2	b) playing computer games	A	B	C	D	E
BSBGDAY3	c) playing or talking with friends outside of school	A	B	C	D	E
BSBGDAY4	d) doing jobs at home	A	B	C	D	E
BSBGDAY5	e) playing sports	A	B	C	D	E
BSBGDAY6	f) reading a book for enjoyment	A	B	C	D	E
BSBMDAY7	g) studying mathematics or doing mathematics homework after school	A	B	C	D	E
BSBSDAY8	h) studying science or doing science homework after school	A	B	C	D	E
BSBGDAY9	i) studying or doing homework in school subjects other than mathematics and science	A	B	C	D	E

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BSBGEDMO
BSBGEDFA

7. How far in school did your mother and father go?

Circle *one* letter, A, B, C, D, E, F, G, or H, in each column.

	<i>a) Mother</i>	<i>b) Father</i>
<some primary school, or did not go to school>	A	A
<finished primary school>	B	B
<some secondary school>	C	C
<finished secondary school>	D	D
<some vocational/technical education after secondary school>	E	E
<some university>	F	F
<finished university>	G	G
I don't know	H	H

BSBGEDSE

8. How far in school do you expect to go?

Circle *one* letter, A, B, C, D, E, or F.

<some secondary school>	A
<finish secondary school>	B
<some vocational/technical education after secondary school>	C
<some university>	D
<finish university>	E
I don't know	F

BSBGBRNM

9a. Was your mother born in <country>?

Circle *either* A or B.

Yes *No*

A B

BSBGBRNF

9b. Was your father born in <country>?

Circle *either* A or B.

A B

BSBGBOOK

10. About how many books are there in your home?

(Do not count magazines, newspapers, or your school books.)

Circle *one* letter, A, B, C, D, or E.

- none or very few (0-10 books) A
- enough to fill one shelf (11-25 books) B
- enough to fill one bookcase (26-100 books) C
- enough to fill two bookcases (101-200 books) D
- enough to fill three or more bookcases (more than 200) E

11. Do you have any of these items at your home?

Circle *either* A or B for each line.

		<i>Yes</i>	<i>No</i>
BSBGPS01	a) calculator	A	B
BSBGPS02	b) computer	A	B
BSBGPS03	c) study desk/table for your use	A	B
BSBGPS04	d) dictionary	A	B
BSBGPS05	e) <country-specific>	A	B
BSBGPS06	f) <country-specific>	A	B
BSBGPS07	g) <country-specific>	A	B
BSBGPS08	h) <country-specific>	A	B
BSBGPS09	i) <country-specific>	A	B
BSBGPS10	j) <country-specific>	A	B
BSBGPS11	k) <country-specific>	A	B
BSBGPS12	l) <country-specific>	A	B
BSBGPS13	m) <country-specific>	A	B
BSBGPS14	n) <country-specific>	A	B
BSBGPS15	o) <country-specific>	A	B
BSBGPS16	p) <country-specific>	A	B

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12. My mother thinks it is important for me to...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSMIP1	a) do well in science at school.....	A	B	C	D
BSBMMIP2	b) do well in mathematics at school.	A	B	C	D
BSBGMIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGMIP5	d) have time to have fun.	A	B	C	D
BSBGMIP4	e) be good at sports.	A	B	C	D

13. In my mathematics class...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMCLS1	a) students often neglect their school work.	A	B	C	D
BSBMCLS2	b) students are orderly and quiet during <lessons>..	A	B	C	D
BSBMCLS3	c) students do exactly as the teacher says.	A	B	C	D

14. Most of my friends think it is important to...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSFIP1	a) do well in science at school.....	A	B	C	D
BSBMFIP2	b) do well in mathematics at school.	A	B	C	D
BSBGFIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGFIP4	d) have time to have fun.	A	B	C	D
BSBGFIP5	e) be good at sports.	A	B	C	D

15. I think it is important to...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSSIP1	a) do well in science at school.	A	B	C	D
BSBMSIP2	b) do well in mathematics at school.	A	B	C	D
BSBGSIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGSIP4	d) have time to have fun.	A	B	C	D
BSBGSIP5	e) be good at sports.	A	B	C	D

16. How well do you usually do in mathematics and science at school?

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMGOOD	a) I usually do well in mathematics.	A	B	C	D
BSBSGOOD	b) I usually do well in science.	A	B	C	D

17. How difficult do you think mathematics is?

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMMYT1	a) I would like mathematics much more if it were not so difficult.	A	B	C	D
BSBMMYT2	b) Although I do my best, mathematics is more difficult for me than for many of my classmates.	A	B	C	D
BSBMMYT3	c) Nobody can be good in every subject, and I am just not talented in mathematics.	A	B	C	D
BSBMMYT4	d) Sometimes, when I do not understand a new topic in mathematics initially, I know that I will never really understand it.	A	B	C	D
BSBMMYT5	e) Mathematics is not one of my strengths.	A	B	C	D

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18. To do well in mathematics at school you need...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMDOW1	a) lots of natural <talent/ability>.....	A	B	C	D
BSBMDOW2	b) good luck.....	A	B	C	D
BSBMDOW3	c) lots of hard work studying at home.....	A	B	C	D
BSBMDOW4	d) to memorize the textbook or notes.	A	B	C	D

19. How difficult do you think science is?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSSYT1	a) I would like science much more if it were not so difficult.	A	B	C	D
BSBSSYT2	b) Although I do my best, science is more difficult for me than for many of my classmates	A	B	C	D
BSBSSYT3	c) Nobody can be good in every subject, and I am just not talented in science.	A	B	C	D
BSBSSYT4	d) Science is not one of my strengths.	A	B	C	D

20. To do well in science at school you need...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSDOW1	a) lots of natural <talent/ability>.....	A	B	C	D
BSBSDOW2	b) good luck.....	A	B	C	D
BSBSDOW3	c) lots of hard work studying at home.....	A	B	C	D
BSBSDOW4	d) to memorize the textbook or notes.	A	B	C	D

21. How much do you like...

Circle one letter, A, B, C, or D, for each line.

		<i>Like a lot</i>	<i>Like</i>	<i>Dislike</i>	<i>Dislike a lot</i>
BSBMLIKM	a) mathematics?	A	B	C	D
BSBSLIK S	b) science?	A	B	C	D

22. How much do you like using computers to learn...

Circle one letter, A, B, C, D, or E, for each line.

		<i>Do not use computers</i>	<i>Like a lot</i>	<i>Like</i>	<i>Dislike</i>	<i>Dislike a lot</i>
BSBMLUCM	a) mathematics?	A	B	C	D	E
BSBSLUC S	b) science?	A	B	C	D	E

23a. Do you have access to the Internet...

Circle one letter, A or B, for each line.

		<i>Yes</i>	<i>No</i>
BSBGINT1	a) at home?	A	B
BSBGINT2	b) at school?	A	B
BSBGINT3	c) elsewhere?	A	B

23b. If you have access to the Internet, how often do you do each of the following?

Circle one letter, A, B, C, or D, for each line.

		<i>At least once a week</i>	<i>At least once a month</i>	<i>A few times a year</i>	<i>Never</i>
BSBG0FT1	d) Use e-mail to work with students in other schools on mathematics projects.	A	B	C	D
BSBG0FT2	e) Use e-mail to work with students in other schools on science projects.	A	B	C	D
BSBG0FT3	f) Use the World Wide Web to access information for mathematics projects.	A	B	C	D
BSBG0FT4	g) Use the World Wide Web to access information for science projects.	A	B	C	D

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24. What do you think about mathematics?

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMENJY	a) I enjoy learning mathematics.	A	B	C	D
BSBMBORE	b) Mathematics is boring.	A	B	C	D
BSBMEASY	c) Mathematics is an easy subject.	A	B	C	D
BSBMLIFE	d) Mathematics is important to everyone's life.	A	B	C	D
BSBMWORK	e) I would like a job that involved using mathematics.	A	B	C	D

25. I need to do well in mathematics...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMJOB	a) to get the job I want.	A	B	C	D
BSBMPRNT	b) to please my parent(s).	A	B	C	D
BSBMSCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBMSELF	d) to please myself.	A	B	C	D

26. How often does this happen in your mathematics lessons?

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBMPROB	a) The teacher shows us how to do mathematics problems.	A	B	C	D
BSBMNOTE	b) We copy notes from the board.	A	B	C	D
BSBMTEST	c) We have a quiz or test.	A	B	C	D
BSBMPROJ	d) We work on mathematics projects.	A	B	C	D
BSBMWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBMCALC	f) We use calculators.	A	B	C	D
BSBMCOMP	g) We use computers.	A	B	C	D
BSBMEVLF	h) We use things from everyday life in solving mathematics problems.	A	B	C	D
BSBMSGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBMHWGV	j) The teacher gives us homework.	A	B	C	D
BSBMHWCL	k) We can begin our homework in class.	A	B	C	D
BSBMHWTC	l) The teacher checks homework.	A	B	C	D
BSBMHWFC	m) We check each other's homework.	A	B	C	D
BSBMHWDS	n) We discuss our completed homework.	A	B	C	D
BSBMUSBT	o) The teacher uses the board.	A	B	C	D
BSBMUSOT	p) The teacher uses an overhead projector.	A	B	C	D
BSBMUSBS	q) Students use the board.	A	B	C	D
BSBMUSOS	r) Students use the overhead projector.	A	B	C	D
BSBMRUPT	s) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBMIDEA	t) The teacher uses a computer to demonstrate ideas in mathematics.	A	B	C	D

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27. When we begin a new topic in mathematics, we begin by...

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBMRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBMPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBMSMGP	c) working together in pairs or small groups on a problem or project.	A	B	C	D
BSBMASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBMTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBMEG	f) trying to solve an example related to the new topic.	A	B	C	D

BSBSSCYE

28. Are you studying science in school this year?

Circle *either* A or B.

Yes A

No B

29. What do you think about science?

Circle *one* letter, A, B, C, or D, for each line.

BSBSENJY

	<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
a) I enjoy learning science.	A	B	C	D

BSBSBORE

b) Science is boring.	A	B	C	D
----------------------------	---	---	---	---

BSBSEASY

c) Science is an easy subject.	A	B	C	D
-------------------------------------	---	---	---	---

BSBSLIFE

d) Science is important to everyone's life.	A	B	C	D
--	---	---	---	---

BSBSWORK

e) I would like a job that involved using science.	A	B	C	D
---	---	---	---	---

30. I need to do well in science...

Circle *one* letter, A, B, C, or D, for each line.

BSBSJOB

	<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
a) to get the job I want.	A	B	C	D

BSBSPRNT

b) to please my parents.	A	B	C	D
-------------------------------	---	---	---	---

BSBSSCHL

c) to get into the <secondary school> or university I prefer.	A	B	C	D
---	---	---	---	---

BSBSSELF

d) to please myself.	A	B	C	D
---------------------------	---	---	---	---

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31. How often does this happen in your science lessons?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBSPROB	a) The teacher shows us how to do science problems.	A	B	C	D
BSBSNOTE	b) We copy notes from the board.	A	B	C	D
BSBSTEST	c) We have a quiz or test.	A	B	C	D
BSBSPROJ	d) We work on science projects.	A	B	C	D
BSBSWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBSCALC	f) We use calculators.	A	B	C	D
BSBSCOMP	g) We use computers.	A	B	C	D
BSBSEVLF	h) We use things from every day life in solving science problems.	A	B	C	D
BSBSSGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBSHWGV	j) The teacher gives us homework.	A	B	C	D
BSBSHWCL	k) We can begin our homework in class.	A	B	C	D
BSBSHWTC	l) The teacher checks homework.	A	B	C	D
BSBSHWFC	m) We check each other's homework.	A	B	C	D
BSBSHWDS	n) We discuss our completed homework.	A	B	C	D
BSBSDEMO	o) The teacher gives a demonstration of an experiment.	A	B	C	D
BSBSEXPR	p) We ourselves do an experiment or practical investigation in class.	A	B	C	D
BSBSUSBT	q) The teacher uses the board.	A	B	C	D
BSBSUSOT	r) The teacher uses an overhead projector.	A	B	C	D
BSBSUSBS	s) Students use the board.	A	B	C	D
BSBSUSOS	t) Students use the overhead projector.	A	B	C	D
BSBSRUPT	u) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBSIDEA	v) The teacher uses a computer to demonstrate ideas in science.	A	B	C	D

32. When we begin a new topic in science, we begin by...

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBSRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBSPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBSSMGP	c) working together in small groups on a problem or project.	A	B	C	D
BSBSASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBSTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBSEG	f) trying to solve an example related to the new topic.	A	B	C	D

THANK YOU for the thought and effort you have put into answering these questions. We wish you well in all that you do.

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INTERNATIONAL OPTION

33. Do each of these people live at home with you most or all of the time?

Circle either A or B for each line.

		<i>Yes</i>	<i>No</i>
BSBGADU1	a) mother	A	B
BSBGADU2	b) father	A	B
BSBGADU3	c) one or more brothers	A	B
BSBGADU4	d) one or more sisters	A	B
BSBGADU5	e) stepmother	A	B
BSBGADU6	f) stepfather.....	A	B
BSBGADU7	g) one or more grandparents	A	B
BSBGADU8	h) another relative or relatives (uncle, aunt, cousin, etc.)	A	B
BSBGADU9	i) another person or persons (not relatives)	A	B

34. Altogether, how many people live in your home?

Write in the total number of people.

_____ (Don't forget to include yourself.)

35. Outside of school, how often do you do these activities?

Circle one letter, A, B, C, or D, for each line.

		<i>About every day</i>	<i>About once a week</i>	<i>About once a month</i>	<i>Rarely</i>
BSBGACT1	a) read a book or magazine	A	B	C	D
BSBGACT2	b) visit a museum or art exhibition.....	A	B	C	D
BSBGACT3	c) attend a concert	A	B	C	D
BSBGACT4	d) go to the theatre	A	B	C	D
BSBGACT5	e) go to the movies	A	B	C	D

36. Outside of school, how often do you watch the following kinds of programs on television or video?

Circle *one* letter, A, B, C, or D, for each line.

		<i>About every day</i>	<i>About once a week</i>	<i>About once a month</i>	<i>Rarely</i>
BSBGNEWS	a) news or documentaries	A	B	C	D
BSBGOPER	b) opera, ballet or classical music	A	B	C	D
BSBGNATR	c) nature, wildlife or history	A	B	C	D
BSBGPOPU	d) popular music	A	B	C	D
BSBGSPRT	e) sports	A	B	C	D
BSBGVIDE	f) video games	A	B	C	D
BSBGCRTN	g) cartoons	A	B	C	D
BSBGCM DY	h) comedy, adventure or suspense	A	B	C	D

37. How often did any of these things happen last month in school?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Never</i>	<i>Once or twice</i>	<i>3-4 times</i>	<i>5 or more</i>
BSBGSSKP	a) I skipped a class.	A	B	C	D
BSBGSS TL	b) Something of mine was stolen.	A	B	C	D
BSBGSHRT	c) I thought another student might hurt me.	A	B	C	D
BSBGFSKP	d) Some of my friends skipped classes.	A	B	C	D
BSBGFSTL	e) Some of my friends had things stolen.	A	B	C	D
BSBGFHRT	f) Some of my friends were hurt by other students.	A	B	C	D

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38. Listed below are some of the world's environmental problems. How much do you think the application of science can help in addressing these problems?

Circle one letter, A, B, C, or D, for each line.

		<i>Not at all</i>	<i>Very little</i>	<i>Somewhat</i>	<i>A great deal</i>
BSBGENV1	a) air pollution	A	B	C	D
BSBGENV2	b) water pollution	A	B	C	D
BSBGENV3	c) destruction of forests	A	B	C	D
BSBGENV4	d) endangered species	A	B	C	D
BSBGENV5	e) damage to the ozone layer	A	B	C	D
BSBGENV6	f) problems from nuclear power plants	A	B	C	D

BSBSCARE

39. If you were going to choose a career that uses a science, which science would you prefer to use?

Circle one letter, A, B, C, or D.

- Biology A
- Chemistry B
- Earth Science C
- Physics D

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STOP

There are no more questions in this booklet

If you have finished answering this booklet before the time is over then you may go back and review your answers. Thank you for taking the time to answer these questions carefully.

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THERE ARE NO QUESTIONS ON THIS PAGE

Section 2

Student Background Questionnaire
Separate Sciences Version (SQ2S)



Identification Label

School:

Class:

Student:

IEA Third International Mathematics and Science Study - Repeat

Student Questionnaire (s)

Main Survey

TIMSS Study Center
Boston College
Chestnut Hill, MA 02467
USA

(Institute Address)

TIMSS-R Ref.No. 98-0036
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TIMSS-R Ref.No. 98-0036

GENERAL DIRECTIONS

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

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

Some of the questions will be followed by a few possible choices indicated with a letter next to or below it. For these questions, circle the letter next to or below your choice as shown in Example 1.

Example 1

1. I attend school *Yes* *No*
(A) B

The letter "A" has been circled because you attend school.

If you decide to change your response to a question, put an "X" over your first choice and then put a circle around your new choice as shown in Example 2.

Example 2

1. I like ice cream *Strongly agree* *Agree* *Disagree* *Strongly disagree*
(A) ~~(B)~~ C D

For other questions you will be asked to write a number or date in the space provided in your booklet. For these questions, you may use words and numbers in your answers. When you write, please be sure that your handwriting is clear.

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BSBGBIRD
BSBGBIRM
BSBGBIRY

1. On what date were you born?

Write in the day, month and year.

<____day ____ month ____year>

<NRC NOTE: USE STYLE APPROPRIATE TO YOUR COUNTRY AND GRADE LEVEL.>

BSBGSEX

2. Are you a girl or a boy?

Circle either A or B.

girl A

boy B

BSBGBRN1

3a. Were you born in <country> ?

Circle either A or B.

Yes A

No B

BSBGBRN2

3b. If you were not born in <country>, how old were you when you came to <country>?

Write in your age at the time.

I was _____ years old when I came to <country>.

BSBGLANG

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

Circle either A, B, or C.

always or almost always A

sometimes B

never C

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5. During the week, how much time before or after school do you usually spend...

Circle one letter, A, B, C, D, or E, for each line.

		<i>No time</i>	<i>Less than 1 hour</i>	<i>1-2 hours</i>	<i>3-5 hours</i>	<i>More than 5 hours</i>
BSBMEXTR	a) taking <extra lessons/cramming school> in mathematics?	A	B	C	D	E
BSBSEXTR	b) taking <extra lessons/cramming school> in science?	A	B	C	D	E
BSBGCLUB	c) participating in science or mathematics clubs?	A	B	C	D	E
BSBGPAID	d) working at a paid job?	A	B	C	D	E

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

Circle one letter, A, B, C, D, or E, for each line.

		<i>No time</i>	<i>Less than 1 hour</i>	<i>1-2 hours</i>	<i>3-5 hours</i>	<i>More than 5 hours</i>
BSBGDAY1	a) watching television and videos	A	B	C	D	E
BSBGDAY2	b) playing computer games	A	B	C	D	E
BSBGDAY3	c) playing or talking with friends outside of school	A	B	C	D	E
BSBGDAY4	d) doing jobs at home	A	B	C	D	E
BSBGDAY5	e) playing sports	A	B	C	D	E
BSBGDAY6	f) reading a book for enjoyment	A	B	C	D	E
BSBMDAY7	g) studying mathematics or doing mathematics homework after school	A	B	C	D	E
BSBSDAY8	h) studying science or doing science homework after school	A	B	C	D	E
BSBGDAY9	i) studying or doing homework in school subjects other than mathematics and science	A	B	C	D	E

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BSBGEDMO
BSBGEDFA

7. How far in school did your mother and father go?

Circle *one* letter, A, B, C, D, E, F, G, or H, in each *column*.

	<i>a) Mother</i>	<i>b) Father</i>
<some primary school, or did not go to school>	A	A
<finished primary school>	B	B
<some secondary school>	C	C
<finished secondary school>	D	D
<some vocational/technical education after secondary school>	E	E
<some university>	F	F
<finished university>	G	G
I don't know	H	H

BSBGEDSE

8. How far in school do you expect to go?

Circle *one* letter, A, B, C, D, E, or F.

- <some secondary school> A
- <finish secondary school> B
- <some vocational/technical education after secondary school> C
- <some university> D
- <finish university> E
- I don't know F

BSBGBRNM

9a. Was your mother born in <country>?

Circle *either* A or B.

Yes *No*

A B

BSBGBRNF

9b. Was your father born in <country>?

Circle *either* A or B.

A B

BSBGBOOK

10. About how many books are there in your home?

(Do not count magazines, newspapers, or your school books.)

Circle *one* letter, A, B, C, D, or E.

- none or very few (0-10 books) A
- enough to fill one shelf (11-25 books) B
- enough to fill one bookcase (26-100 books) C
- enough to fill two bookcases (101-200 books) D
- enough to fill three or more bookcases (more than 200) E

11. Do you have any of these items at your home?

Circle *either* A or B for each line.

		<i>Yes</i>	<i>No</i>
BSBGPS01	a) calculator	A	B
BSBGPS02	b) computer	A	B
BSBGPS03	c) study desk/table for your use	A	B
BSBGPS04	d) dictionary	A	B
BSBGPS05	e) <country-specific>	A	B
BSBGPS06	f) <country-specific>	A	B
BSBGPS07	g) <country-specific>	A	B
BSBGPS08	h) <country-specific>	A	B
BSBGPS09	i) <country-specific>	A	B
BSBGPS10	j) <country-specific>	A	B
BSBGPS11	k) <country-specific>	A	B
BSBGPS12	l) <country-specific>	A	B
BSBGPS13	m) <country-specific>	A	B
BSBGPS14	n) <country-specific>	A	B
BSBGPS15	o) <country-specific>	A	B
BSBGPS16	p) <country-specific>	A	B

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12. My mother thinks it is important for me to...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSMIP1	a) do well in science at school.	A	B	C	D
BSBMMIP2	b) do well in mathematics at school.	A	B	C	D
BSBGMIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGMIP5	d) have time to have fun.	A	B	C	D
BSBGMIP4	e) be good at sports.	A	B	C	D

13. In my mathematics class...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMCLS1	a) students often neglect their school work.	A	B	C	D
BSBMCLS2	b) students are orderly and quiet during <lessons>..	A	B	C	D
BSBMCLS3	c) students do exactly as the teacher says.	A	B	C	D

14. Most of my friends think it is important to...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSFIP1	a) do well in science at school.	A	B	C	D
BSBMFIP2	b) do well in mathematics at school.	A	B	C	D
BSBGFIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGFIP4	d) have time to have fun.	A	B	C	D
BSBGFIP5	e) be good at sports.	A	B	C	D

15. I think it is important to...

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSSIP1	a) do well in science at school.	A	B	C	D
BSBMSIP2	b) do well in mathematics at school.	A	B	C	D
BSBGSIP3	c) do well in <language of test> at school.	A	B	C	D
BSBGSIP4	d) have time to have fun.	A	B	C	D
BSBGSIP5	e) be good at sports.	A	B	C	D

16. How well do you usually do in mathematics and science at school?

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMGOOD	a) I usually do well in mathematics.	A	B	C	D
BSBBGOOD	b) I usually do well in biological science.	A	B	C	D
BSBEGOOD	c) I usually do well in earth science.	A	B	C	D
BSBCGOOD	d) I usually do well in chemistry	A	B	C	D
BSBPGOOD	e) I usually do well in physics	A	B	C	D

17. How difficult do you think mathematics is?

Circle one letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMMYT1	a) I would like mathematics much more if it were not so difficult.	A	B	C	D
BSBMMYT2	b) Although I do my best, mathematics is more difficult for me than for many of my classmates.	A	B	C	D
BSBMMYT3	c) Nobody can be good in every subject, and I am just not talented in mathematics.	A	B	C	D
BSBMMYT4	e) Sometimes, when I do not understand a new topic in mathematics initially, I know that I will never really understand it.	A	B	C	D
BSBMMYT5	f) Mathematics is not one of my strengths.	A	B	C	D

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18. To do well in mathematics at school you need...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMDOW1	a) lots of natural <talent/ability>.....	A	B	C	D
BSBMDOW2	b) good luck.....	A	B	C	D
BSBMDOW3	c) lots of hard work studying at home.....	A	B	C	D
BSBMDOW4	d) to memorize the textbook or notes.....	A	B	C	D

19. How difficult do you think biological science is?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSBYT1	a) I would like biological science much more if it were not so difficult.	A	B	C	D
BSBSBYT2	b) Although I do my very best, biological science is more difficult for me than for many of my classmates	A	B	C	D
BSBSBYT3	c) Nobody can be good in every subject, and I am just not talented in biological science.	A	B	C	D
BSBSBYT4	d) Biological science is not one of my strengths.....	A	B	C	D

20. How difficult do you think earth science is?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSEYT1	a) I would like earth science much more if it were not so difficult.	A	B	C	D
BSBSEYT2	b) Although I do my very best, earth science is more difficult for me than for many of my classmates	A	B	C	D
BSBSEYT3	c) Nobody can be good in every subject, and I am just not talented in earth science.	A	B	C	D
BSBSEYT4	d) Earth science is not one of my strengths.....	A	B	C	D

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21. How difficult do you think chemistry is?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSCYT1	a) I would like chemistry much more if it were not so difficult.	A	B	C	D
BSBSCYT2	b) Although I do my very best, chemistry is more difficult for me than for many of my classmates .	A	B	C	D
BSBSCYT3	c) Nobody can be good in every subject, and I am just not talented in chemistry.	A	B	C	D
BSBSCYT4	d) Chemistry is not one of my strengths.	A	B	C	D

22. How difficult do you think physics is?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSPYT1	a) I would like physics much more if it were not so difficult.	A	B	C	D
BSBSPYT2	b) Although I do my very best, physics is more difficult for me than for many of my classmates .	A	B	C	D
BSBSPYT3	c) Nobody can be good in every subject, and I am just not talented in physics.	A	B	C	D
BSBSPYT4	d) Physics is not one of my strengths.	A	B	C	D

23. To do well in science at school you need...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBSDOW1	a) lots of natural <talent/ability>.	A	B	C	D
BSBSDOW2	b) good luck.	A	B	C	D
BSBSDOW3	c) lots of hard work studying at home.	A	B	C	D
BSBSDOW4	d) to memorize the textbook or notes.	A	B	C	D

24. How much do you like...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Like a lot</i>	<i>Like</i>	<i>Dislike</i>	<i>Dislike a lot</i>
BSBMLIKM	a) mathematics?	A	B	C	D
BSBBLIKB	b) biological science?	A	B	C	D
BSBELIKS	c) earth science?	A	B	C	D
BSBCLIKC	d) chemistry?	A	B	C	D
BSBPLIKP	e) physics?	A	B	C	D

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25. How much do you like using computers to learn...

Circle one letter, A, B, C, D, or E, for each line.

		<i>Do not use computers</i>	<i>Like a lot</i>	<i>Like</i>	<i>Dislike</i>	<i>Dislike a lot</i>
BSBMLUCM	a) mathematics?	A	B	C	D	E
BSBSLUCS	b) science?	A	B	C	D	E

26a. Do you have access to the Internet...

Circle one letter, A or B, for each line.

		<i>Yes</i>	<i>No</i>
BSBGINT1	a) at home?	A	B
BSBGINT2	b) at school?	A	B
BSBGINT3	c) elsewhere?	A	B

26b. If you have access to the Internet, how often do you do each of the following?

Circle one letter, A, B, C, or D, for each line.

		<i>At least once a week</i>	<i>At least once a month</i>	<i>A few times a year</i>	<i>Never</i>
BSBG0FT1	d) Use e-mail to work with students in other schools on mathematics projects.	A	B	C	D
BSBG0FT2	e) Use e-mail to work with students in other schools on science projects.	A	B	C	D
BSBG0FT3	f) Use the World Wide Web to access information for mathematics projects.	A	B	C	D
BSBG0FT4	g) Use the World Wide Web to access information for science projects.	A	B	C	D

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27. What do you think about mathematics?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMENJY	a) I enjoy learning mathematics.	A	B	C	D
BSBMBORE	b) Mathematics is boring.	A	B	C	D
BSBMEASY	c) Mathematics is an easy subject.	A	B	C	D
BSBMLIFE	d) Mathematics is important to everyone's life.	A	B	C	D
BSBMWORK	e) I would like a job that involved using mathematics.	A	B	C	D

28. I need to do well in mathematics...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBMJOB	a) to get the job I want.	A	B	C	D
BSBMPRNT	b) to please my parent(s).	A	B	C	D
BSBMSCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBMSELF	d) to please myself.	A	B	C	D

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29. How often does this happen in your mathematics lessons?

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBMPROB	a) The teacher shows us how to do mathematics problems.	A	B	C	D
BSBMNOTE	b) We copy notes from the board.	A	B	C	D
BSBMTEST	c) We have a quiz or test.	A	B	C	D
BSBMPROJ	d) We work on mathematics projects.	A	B	C	D
BSBMWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBMCALC	f) We use calculators.	A	B	C	D
BSBMCOMP	g) We use computers.	A	B	C	D
BSBMEVLF	h) We use things from everyday life in solving mathematics problems.	A	B	C	D
BSBMGRP	i) We work together in pairs or small groups	A	B	C	D
BSBMHWGV	j) The teacher gives us homework.	A	B	C	D
BSBMHWCL	k) We can begin our homework in class.	A	B	C	D
BSBMHWTC	l) The teacher checks homework.	A	B	C	D
BSBMHWFC	m) We check each other's homework.	A	B	C	D
BSBMHWDS	n) We discuss our completed homework.	A	B	C	D
BSBMUSBT	o) The teacher uses the board.	A	B	C	D
BSBMUSOT	p) The teacher uses an overhead projector.	A	B	C	D
BSBMUSBS	q) Students use the board.	A	B	C	D
BSBMUSOS	r) Students use the overhead projector.	A	B	C	D
BSBMRUPT	s) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBMIDEA	t) The teacher uses a computer to demonstrate ideas in mathematics.	A	B	C	D

30. When we begin a new topic in mathematics, we begin by...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBMRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBMPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBMSGP	c) working together in pairs or small groups on a problem or project.	A	B	C	D
BSBMASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBMTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBMEG	f) trying to solve an example related to the new topic.	A	B	C	D

31. Which science(s) are you studying this year?

Circle the letter next to *each* science you are studying.

BSBBSTDY	Biology	A	(Complete Questions #32 - 35)
BSBCSTDY	Chemistry	B	(Complete Questions #36 - 39)
BSBESTDY	Earth Science	C	(Complete Questions #40 - 43)
BSBPSTDY	Physics	D	(Complete Questions #44 - 47)

COMPLETE QUESTIONS ONLY FOR THOSE COURSES YOU ARE CURRENTLY TAKING.

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FILL IN ONLY IF YOU ARE STUDYING BIOLOGY

32. What do you think about biology?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBBENJY	a) I enjoy learning biology.	A	B	C	D
BSBBBORE	b) Biology is boring.	A	B	C	D
BSBBEASY	c) Biology is an easy subject.	A	B	C	D
BSBBLIFE	d) Biology is important to everyone's life.	A	B	C	D
BSBBWORK	e) I would like a job that involved using biology. ...	A	B	C	D

33. I need to do well in biology...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBBJOB	a) to get the job I want.	A	B	C	D
BSBBPRNT	b) to please my parents.	A	B	C	D
BSBBSCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBBSELF	d) to please myself.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING BIOLOGY

34. How often does this happen in your biology lessons?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBBPROB	a) The teacher shows us how to do biology problems.	A	B	C	D
BSBBNOTE	b) We copy notes from the board.	A	B	C	D
BSBBTEST	c) We have a quiz or test.	A	B	C	D
BSBBPROJ	d) We work on biology projects.	A	B	C	D
BSBBWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBBCALC	f) We use calculators.	A	B	C	D
BSBBCOMP	g) We use computers.	A	B	C	D
BSBBEVLf	h) We use things from every day life in solving biology problems.	A	B	C	D
BSBBSGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBBHWGV	j) The teacher gives us homework.	A	B	C	D
BSBBHWCL	k) We can begin our homework in class.	A	B	C	D
BSBBHWTC	l) The teacher checks homework.	A	B	C	D
BSBBHWFC	m) We check each other's homework.	A	B	C	D
BSBBHWDS	n) We discuss our completed homework.	A	B	C	D
BSBBDEMO	o) The teacher gives a demonstration of an experiment.	A	B	C	D
BSBBEXPR	p) We ourselves do an experiment or practical investigation in class.	A	B	C	D
BSBBUSBT	q) The teacher uses the board.	A	B	C	D
BSBBUSOT	r) The teacher uses an overhead projector.	A	B	C	D
BSBBUSBS	s) Students use the board.	A	B	C	D
BSBBUSOS	t) Students use the overhead projector.	A	B	C	D
BSBBRUPT	u) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBBIDEA	v) The teacher uses a computer to demonstrate ideas in biology.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING BIOLOGY

35. When we begin a new topic in biology, we begin by...

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBBRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBBPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBBSMGP	c) working together in small groups on a problem or project.	A	B	C	D
BSBBASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBBTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBBEG	f) trying to solve an example related to the new topic.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING CHEMISTRY**36. What do you think about chemistry?***Circle one letter, A, B, C, or D, for each line.*

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBCENJY	a) I enjoy learning chemistry.	A	B	C	D
BSBCBORE	b) Chemistry is boring.	A	B	C	D
BSBCEASY	c) Chemistry is an easy subject.	A	B	C	D
BSBCLIFE	d) Chemistry is important to everyone's life.	A	B	C	D
BSBCWORK	e) I would like a job that involved using chemistry.	A	B	C	D

37. I need to do well in chemistry...*Circle one letter, A, B, C, or D, for each line.*

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBCJOB	a) to get the job I want.	A	B	C	D
BSBCPRNT	b) to please my parents.	A	B	C	D
BSBCSCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBCSELF	d) to please myself.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING CHEMISTRY**38. How often does this happen in chemistry lessons?***Circle one letter, A, B, C, or D, for each line.*

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBCPROB	a) The teacher shows us how to do chemistry problems.	A	B	C	D
BSBCNOTE	b) We copy notes from the board.	A	B	C	D
BSBCTEST	c) We have a quiz or test.	A	B	C	D
BSBCPROJ	d) We work on chemistry projects.	A	B	C	D
BSBCWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBCCALC	f) We use calculators.	A	B	C	D
BSBCCOMP	g) We use computers.	A	B	C	D
BSBCEVLF	h) We use things from every day life in solving chemistry problems.	A	B	C	D
BSBCSGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBCHWGV	j) The teacher gives us homework.	A	B	C	D
BSBCHWCL	k) We can begin our homework in class.	A	B	C	D
BSBCHWTC	l) The teacher checks homework.	A	B	C	D
BSBCHWFC	m) We check each other's homework.	A	B	C	D
BSBCHWDS	n) We discuss our completed homework.	A	B	C	D
BSBCDEMO	o) The teacher gives a demonstration of an experiment.	A	B	C	D
BSBCEXP	p) We ourselves do an experiment or practical investigation in class.	A	B	C	D
BSBCUSBT	q) The teacher uses the board.	A	B	C	D
BSBCUSOT	r) The teacher uses an overhead projector.	A	B	C	D
BSBCUSBS	s) Students use the board.	A	B	C	D
BSBCUSOS	t) Students use the overhead projector.	A	B	C	D
BSBCRUPT	u) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBCIDEA	v) The teacher uses a computer to demonstrate ideas in chemistry.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING CHEMISTRY**39. When we begin a new topic in chemistry, we begin by...***Circle one letter, A, B, C, or D, for each line.*

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBCRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBCPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBCSMGP	c) working together in small groups on a problem or project.	A	B	C	D
BSBCASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBCTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBCEG	f) trying to solve an example related to the new topic.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING EARTH SCIENCE

40. What do you think about earth science?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBEENJY	a) I enjoy learning earth science.	A	B	C	D
BSBEBORE	b) Earth science is boring.	A	B	C	D
BSBEEASY	c) Earth science is an easy subject.	A	B	C	D
BSBELIFE	d) Earth science is important to everyone's life.	A	B	C	D
BSBEWORK	e) I would like a job that involved using earth science.	A	B	C	D

41. I need to do well in earth science...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBEJOB	a) to get the job I want.	A	B	C	D
BSBEPRNT	b) to please my parents.	A	B	C	D
BSBESCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBESELF	d) to please myself.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING EARTH SCIENCE

42. How often does this happen in your earth science lessons?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBEPROB	a) The teacher shows us how to do earth science problems.	A	B	C	D
BSBENOTE	b) We copy notes from the board.	A	B	C	D
BSBETEST	c) We have a quiz or test.	A	B	C	D
BSBEPROJ	d) We work on earth science projects.	A	B	C	D
BSBEWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBECALC	f) We use calculators.	A	B	C	D
BSBECOMP	g) We use computers.	A	B	C	D
BSBEEVLF	h) We use things from every day life in solving earth science problems.	A	B	C	D
BSBESGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBEHWGV	j) The teacher gives us homework.	A	B	C	D
BSBEHWCL	k) We can begin our homework in class.	A	B	C	D
BSBEHWTC	l) The teacher checks homework.	A	B	C	D
BSBEHWFC	m) We check each other's homework.	A	B	C	D
BSBEHWDS	n) We discuss our completed homework.	A	B	C	D
BSBEDEMO	o) The teacher gives a demonstration of an experiment.	A	B	C	D
BSBEEXPR	p) We ourselves do an experiment or practical investigation in class.	A	B	C	D
BSBEUSBT	q) The teacher uses the board.	A	B	C	D
BSBEUSOT	r) The teacher uses an overhead projector.	A	B	C	D
BSBEUSBS	s) Students use the board.	A	B	C	D
BSBEUSOS	t) Students use the overhead projector.	A	B	C	D
BSBERUPT	u) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBEIDEA	v) The teacher uses a computer to demonstrate ideas in earth science.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING EARTH SCIENCE

43. When we begin a new topic in earth science, we begin by...

Circle one letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBERULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBEPRAC	b) starting with a practical or story problem related to everyday life.	A	B	C	D
BSBESMGP	c) working together in small groups on a problem or project.	A	B	C	D
BSBEASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBETXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBEEG	f) trying to solve an example related to the new topic.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING PHYSICS

44. What do you think about physics?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBPENJY	a) I enjoy learning physics.	A	B	C	D
BSBPBORE	b) Physics is boring.	A	B	C	D
BSBPPEASY	c) Physics is an easy subject.	A	B	C	D
BSBPPLIFE	d) Physics is important to everyone's life.	A	B	C	D
BSBPWORK	e) I would like a job that involved using physics.....	A	B	C	D

45. I need to do well in physics...

Circle *one* letter, A, B, C, or D, for each line.

		<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>
BSBPJOB	a) to get the job I want.	A	B	C	D
BSBPFRNT	b) to please my parents.	A	B	C	D
BSBPSCHL	c) to get into the <secondary school> or university I prefer.	A	B	C	D
BSBPSELF	d) to please myself.....	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING PHYSICS

46. How often does this happen in your physics lessons?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBPPROB	a) The teacher shows us how to do physics problems.	A	B	C	D
BSBPNOTE	b) We copy notes from the board.	A	B	C	D
BSBPTEST	c) We have a quiz or test.	A	B	C	D
BSBPPROJ	d) We work on physics projects.	A	B	C	D
BSBPWSHT	e) We work from worksheets or textbooks on our own.	A	B	C	D
BSBPCALC	f) We use calculators.	A	B	C	D
BSBPCOMP	g) We use computers.	A	B	C	D
BSBPEVLF	h) We use things from every day life in solving physics problems.	A	B	C	D
BSBPSSGRP	i) We work together in pairs or small groups.	A	B	C	D
BSBPHWGV	j) The teacher gives us homework.	A	B	C	D
BSBPHWCL	k) We can begin our homework in class.	A	B	C	D
BSBPHWTC	l) The teacher checks homework.	A	B	C	D
BSBPHWFC	m) We check each other's homework.	A	B	C	D
BSBPHWDS	n) We discuss our completed homework.	A	B	C	D
BSBPDEMO	o) The teacher gives a demonstration of an experiment.	A	B	C	D
BSBPEXPR	p) We ourselves do an experiment or practical investigation in class.	A	B	C	D
BSBPUSBT	q) The teacher uses the board.	A	B	C	D
BSBPUSOT	r) The teacher uses an overhead projector.	A	B	C	D
BSBPUSBS	s) Students use the board.	A	B	C	D
BSBPUSOS	t) Students use the overhead projector.	A	B	C	D
BSBPRUPT	u) The teacher gets interrupted by messages, visitors, etc.	A	B	C	D
BSBPIDEA	v) The teacher uses a computer to demonstrate ideas in physics.	A	B	C	D

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FILL IN ONLY IF YOU ARE STUDYING PHYSICS

47. When we begin a new topic in physics, we begin by...

Circle **one** letter, A, B, C, or D, for each line.

		<i>Almost always</i>	<i>Pretty often</i>	<i>Once in a while</i>	<i>Never</i>
BSBPRULE	a) having the teacher explain the rules and definitions.	A	B	C	D
BSBPPRAC	b) discussing a practical or story problem related to everyday life.	A	B	C	D
BSBPSMGP	c) working together in small groups on a problem or project.	A	B	C	D
BSBPASK	d) having the teacher ask us what we know related to the new topic.	A	B	C	D
BSBPTXBK	e) looking at the textbook while the teacher talks about it.	A	B	C	D
BSBPEG	f) trying to solve an example related to the new topic.	A	B	C	D

THANK YOU for the thought and effort you have put into answering these questions. We wish you well in all that you do.

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INTERNATIONAL OPTION

48. Do each of these people live at home with you most or all of the time?

Circle *either* A or B for each line.

		<i>Yes</i>	<i>No</i>
BSBGADU1	a) mother	A	B
BSBGADU2	b) father	A	B
BSBGADU3	c) one or more brothers	A	B
BSBGADU4	d) one or more sisters	A	B
BSBGADU5	e) stepmother	A	B
BSBGADU6	f) stepfather	A	B
BSBGADU7	g) one or more grandparents.....	A	B
BSBGADU8	h) another relative or relatives (uncle, aunt, cousin, etc.)	A	B
BSBGADU9	i) another person or persons (not relatives)	A	B

BSBGHOME

49. Altogether, how many people live in your home?

Write in the total number of people.

_____ (Don't forget to include yourself.)

50. Outside of school, how often do you do these activities?

Circle *one* letter, A, B, C, or D, for each line.

		<i>About every day</i>	<i>About once a week</i>	<i>About once a month</i>	<i>Rarely</i>
BSBGACT1	a) read a book or magazine	A	B	C	D
BSBGACT2	b) visit a museum or art exhibition.....	A	B	C	D
BSBGACT3	c) attend a concert	A	B	C	D
BSBGACT4	d) go to the theatre.....	A	B	C	D
BSBGACT5	e) go to the movies	A	B	C	D

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51. Outside of school, how often do you watch the following kinds of programs on television or video?

Circle *one* letter, A, B, C, or D, for each line.

		<i>About every day</i>	<i>About once a week</i>	<i>About once a month</i>	<i>Rarely</i>
BSBGNEWS	a) news or documentaries	A	B	C	D
BSBGOPER	b) opera, ballet or classical music	A	B	C	D
BSBGNATR	c) nature, wildlife or history	A	B	C	D
BSBGPOPU	d) popular music	A	B	C	D
BSBGSPRT	e) sports	A	B	C	D
BSBGVIDE	f) video games	A	B	C	D
BSBGCRTN	g) cartoons	A	B	C	D
BSBGCMDY	h) comedy, adventure or suspense	A	B	C	D

52. How often did any of these things happen last month in school?

Circle *one* letter, A, B, C, or D, for each line.

		<i>Never</i>	<i>Once or twice</i>	<i>3-4 times</i>	<i>5 or more</i>
BSBGSSKP	a) I skipped a class.	A	B	C	D
BSBGSSTL	b) Something of mine was stolen.	A	B	C	D
BSBGSHRT	c) I thought another student might hurt me.	A	B	C	D
BSBGFSKP	d) Some of my friends skipped classes.	A	B	C	D
BSBGFSTL	e) Some of my friends had things stolen.	A	B	C	D
BSBGFHRT	f) Some of my friends were hurt by other students.	A	B	C	D

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53. Listed below are some of the world's environmental problems. How much do you think the application of science can help in addressing these problems?

Circle one letter, A, B, C, or D, for each line.

		<i>Not at all</i>	<i>Very little</i>	<i>Somewhat</i>	<i>A great deal</i>
BSBGENV1	a) air pollution	A	B	C	D
BSBGENV2	b) water pollution	A	B	C	D
BSBGENV3	c) destruction of forests	A	B	C	D
BSBGENV4	d) endangered species.....	A	B	C	D
BSBGENV5	e) damage to the ozone layer.....	A	B	C	D
BSBGENV6	f) problems from nuclear power plants.....	A	B	C	D

BSBSCARE

54. If you were going to choose a career that uses a science, which science would you prefer to use?

Circle one letter, A, B, C, or D.

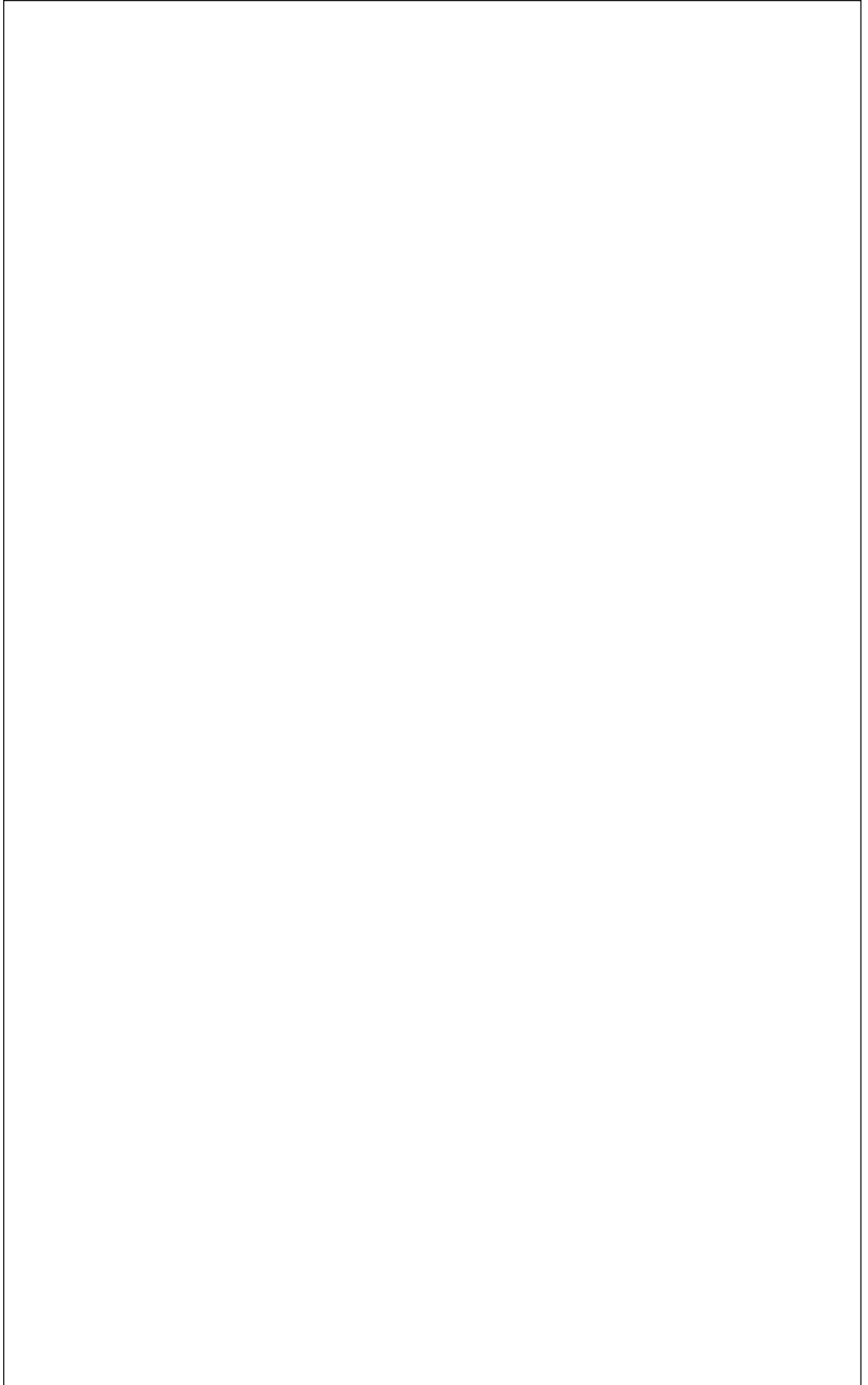
- Biology A
- Chemistry B
- Earth Science C
- Physics D

STOP

There are no more questions in this booklet

If you have finished answering this booklet before the time is over then you may go back and review your answers. Thank you for taking the time to answer these questions carefully.

Section 3



TIMSS-R Ref.No. 98-0037

GENERAL DIRECTIONS:

1. Identify a place and a time when you will be able to complete this questionnaire without being interrupted. This questionnaire has been designed to be completed within 60 minutes by most teachers. However, the amount of time you will need may vary. To make it as easy as possible for you to respond, most items may be completed simply by checking the appropriate box.
2. There are no “right” or “wrong” answers to any of these items. The questionnaire is designed to provide information about teachers’ professional experiences, opinions, and classroom activities. **Remember, “your mathematics class” is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS-R in your school.**
3. More specific instructions to assist you in responding are found in *italics* for each item. Once you have completed the questionnaire, place it into the return envelope provided and return it to:

<Country Specific Information>

Again, thank you for your time, effort, and thought in completing this questionnaire!

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THERE ARE NO QUESTIONS ON THIS PAGE

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Section A

BTBGAGE

1. How old are you?

Check one box only.

- under 25
- 25-29
- 30-39
- 40-49
- 50-59
- 60 or more

BTBGSEX

2. Are you female or male?

Check one box only.

- female
- male

BTBGTAUG

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

Please round to the nearest whole number.

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BTBGTOTL

4. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> in one school week altogether?

Write in number <hours/periods>

5. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to teach each of the following subjects?

NRC Note: <List only the generic science courses appropriate for your country.>

Count a double <hour/period> as two single <hours/periods>. Write zero if none.

Number of single <hours/periods>

BTBMSUB1

a) mathematics _____

BTBSSUB2

b) <GENERAL/INTEGRATED SCIENCE> _____

BTBSSUB3

c) <PHYSICAL SCIENCE> _____

BTBSSUB4

d) <EARTH SCIENCE> _____

BTBSSUB5

e) <LIFE SCIENCE> _____

BTBSSUB6

f) <BIOLOGY> _____

BTBSSUB7

g) <CHEMISTRY> _____

BTBSSUB8

h) <PHYSICS> _____

BTBGSUB9

i) other subjects _____

6. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to perform each of the following tasks?

Count a double <hour/period> as two single <hours/periods>. Write zero if none.

Number of single <hours/periods>

BTBGTSK1

a) student supervision (other than teaching) _____

BTBGTSK2

b) student counselling/appraisal _____

BTBGTSK3

c) administrative duties _____

BTBGTSK4

d) individual curriculum planning _____

BTBGTSK5

e) cooperative curriculum planning _____

BTBGTSK6

f) other non-student contact time (i.e., use not specified) _____

BTBGTSK7

g) other _____

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7. APPROXIMATELY how many hours per week do you normally spend on each of the following activities outside the formal school day? Do not include time already accounted for in Question # 6.

Check one box in each row.

		<i>None</i>	<i>Less than 1 hour</i>	<i>1 - 2 hours</i>	<i>3 - 4 hours</i>	<i>More than 4 hours</i>
BTBGACT1	a) preparing or grading student tests or exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT2	b) reading and grading other student work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT3	c) planning lessons by yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT4	d) meeting with students outside of classroom time (e.g., tutoring, guidance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT5	e) meeting with parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT6	f) professional reading and development activity (e.g., seminars, conferences, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT7	g) keeping students' records up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT8	h) administrative tasks including staff meetings (e.g. photocopying, displaying students' work)....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT9	i) other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. APPROXIMATELY how many hours per week do you normally spend on your teaching activities altogether (include time spent in and out of school)?

Please round to the nearest whole hour. _____

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BTBGMEET

9. About how often do you have meetings with other teachers in your subject area to discuss and plan curriculum or teaching approaches?

Check one box only.

- never
- once or twice a year
- every other month
- once a month
- once a week
- two or three times a week
- almost every day

10. How much influence do you have on each of the following...

Check one box in each row.

None Little Some A lot

BTBGINF1

a) subject matter to be taught

BTBGINF2

b) specific textbooks to be used

BTBGINF3

c) the amount of money to be spent on supplies

BTBGINF4

d) what supplies are purchased.....

11. To be good at mathematics at school, how important do you think it is for students to...

Check one box in each row.

Not Somewhat Very important important important

BTBMIMP1

a) remember formulas and procedures

BTBMIMP2

b) think in a sequential and procedural manner

BTBMIMP3

c) understand mathematical concepts, principles, and strategies

BTBMIMP4

d) be able to think creatively

BTBMIMP5

e) understand how mathematics is used in the real world ..

BTBMIMP6

f) be able to provide reasons to support their solutions

12. To what extent do you agree or disagree with each of the following statements?

Check one box in each row.

		<i>Strongly disagree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
BTBMAGR1	a) Mathematics is primarily an abstract subject.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR2	b) Mathematics is primarily a formal way of representing the real world.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR3	c) Mathematics is primarily a practical and structured guide for addressing real situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGAGR4	d) If students are having difficulty, an effective approach is to give them more practice by themselves during the class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR5	e) Some students have a natural talent for mathematics and others do not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR6	f) More than one representation (picture, concrete material, symbol set, etc.) should be used in teaching a mathematics topic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR7	g) Mathematics should be learned as sets of algorithms or rules that cover all possibilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR8	h) Basic computational skills on the part of the teacher are sufficient for teaching <PRIMARY SCHOOL> mathematics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMAGR9	i) A liking for and understanding of students are essential for teaching mathematics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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13. Indicate your familiarity with each of the following documents:

NRC Note: <Include country-specific appropriate options only.>

Check **one** box in each row.

		<i>No such document</i>	<i>Not familiar</i>	<i>Fairly familiar</i>	<i>Very familiar</i>
BTBMFAM1	a) <THE NATIONAL CURRICULUM GUIDE FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFAM2	b) <THE REGIONAL CURRICULUM GUIDE(S) FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM3	c) <THE SCHOOL CURRICULUM GUIDE>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM4	d) <THE NATIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM5	e) <THE REGIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFAM6	f) <THE NATIONAL PEDAGOGY GUIDE FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFAM7	g) <THE REGIONAL PEDAGOGY GUIDE FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How well prepared do you feel you are to teach...

Check **one** box in each row.

		<i>I do not teach these topics</i>	<i>Not well prepared</i>	<i>Somewhat prepared</i>	<i>Very well prepared</i>
BTBMFP01	a) fractions, decimals and percentages?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP02	b) ratios and proportions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP03	c) measurement – units, instruments, and accuracy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP04	d) perimeter, area, and volume?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP05	e) geometric figures – definitions and properties? ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP06	f) geometric figures – symmetry, motions and transformations, congruence and similarity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP07	g) coordinate geometry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP08	h) algebraic representation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP09	i) evaluate and perform operations on algebraic expressions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP10	j) solving linear equations and inequalities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP11	k) representation and interpretation of data in graphs, charts, and tables?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFP12	l) simple probabilities – understanding and calculations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BTBGEDUC

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

Check one box only.

- <DID NOT COMPLETE SECONDARY SCHOOL>
- <SECONDARY ONLY>
- <BA OR EQUIVALENT>
- <MA/PHD>

BTBGTRAC

16a. Do you have a <teacher training certificate>?

Check one box only. Yes No

BTBGYETR

16b. How many years of <pre-service teacher training> have you had?

Please round to the nearest whole number. _____
(Write in 0 (zero), if you have not had any teacher training.)

BTBGPTR

16c. If you have had <pre-service teacher training>, did you begin this training in secondary school?

Check one box only. Yes No

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BTBGCMA5

17. While studying to obtain your <BA or equivalent or teacher training certificate>, what was your major or main area of study?

I do not have a <BA or equivalent or teacher training certificate.>
 (Check the box and skip to the next question.)

Check **one** box in each row.

BTBGCMA1

a) Mathematics

BTBGCMA2

b) Biology

BTBGCMA3

c) Physics

BTBGCMA4

d) Chemistry

BTBGCMA5

e) Education

BTBGCMA6

f) Mathematics Education

BTBGCMA7

g) Science Education

BTBGCMA8

h) Other

BTBGMMA5

18. If you have a master's degree, what was your major or main area of study?

I do not have a master's degree.
 (Check the box and skip to the next question.)

Check **one** box in each row.

BTBGMMA1

a) Mathematics

BTBGMMA2

b) Biology

BTBGMMA3

c) Physics

BTBGMMA4

d) Chemistry

BTBGMMA5

e) Education

BTBGMMA6

f) Mathematics Education

BTBGMMA7

g) Science Education

BTBGMMA8

h) Other

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International Option

BTBGCARE

19. Was teaching your first choice as a career when beginning university or teacher education college?

Check only one box. Yes No

BTBGCHNG

20. Would you change to another career if you had the opportunity?

Check only one box. Yes No

BTBGSOAP

21. Do you think that society appreciates your work?

Check only one box. Yes No

BTBGSTAP

22. Do you think your students appreciate your work?

Check only one box. Yes No

BTBGBOOK

23. Approximately how many books are in your home?

(Do not count magazines or newspapers.)

Check one box only.

- none or very few (0-10)
- enough to fill a shelf (11-25)
- enough to fill a bookcase (26-100)
- enough to fill two bookcases (101-200).....
- enough to fill three or more bookcases (more than 200)

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THERE ARE NO QUESTIONS ON THIS PAGE

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Section B

In this section, many of the questions refer to **your mathematics class**. Please remember that this is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS-R in your school.

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BTBMBOY
BTBMGIRL

1. How many students are in your mathematics class?

Write in a number for each. Write 0 (zero) if there are none.

boys _____ girls _____

BTBMSMEC

2. What subject matter do you emphasize most in your mathematics class?

Check one box only.

- mainly number (e.g., whole numbers, fractions, decimals, percentages, etc.)
- geometry
- algebra.....
- combined algebra and geometry
- combined algebra, geometry, number, etc.
- other, please specify _____

BTBMTIME

3. How many minutes per week do you teach mathematics to your mathematics class?

Minutes: _____

BTBMTXBK

4a. Do you use a textbook in teaching mathematics to your class?

Check one box.

Yes No

BTBMTXBR

4b. If yes, approximately what percentage of your weekly mathematics teaching time is based on your mathematics textbook?

Check one box.

- 0-25%
- 26-50%
- 51-75%
- 76-100%

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BTBMCUDL

5. Do the students in your mathematics class have calculators available to use during mathematics lessons?

Check one box only.

Yes No

BTBMWECF

6. To what extent are the students in your mathematics class permitted to use calculators during mathematics lessons?

Check one box only.

unrestricted use

restricted use

calculators are not permitted

7. How often do students in your mathematics class use calculators for the following activities?

Check one box in each row.

BTBMCAL1

a) Checking answers

BTBMCAL2

b) Tests and exams

BTBMCAL3

c) Routine computation

BTBMCAL4

d) Solving complex problems

BTBMCAL5

e) Exploring number concepts

8. Do the students in your mathematics class have computers available to use during mathematics lessons?

Check one box in each row.

BTBM1COM1

a) in the classroom

BTBMCOM2

b) in other instructional rooms (computer labs, science lab, reading lab, library, etc.)

If computers are available,

BTBMINT1

c) do any of the computers have access to the Internet? **Yes** **No**

BTBMINT2

d) do you use the Internet for instructional/educational purposes?

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9. In planning mathematics lessons, what is your main source of written information when...

NRC Note: <List only country-specific appropriate options.>

Check **one** box in each row.

		<National or Regional Examination Specifications>	<National or Regional Curriculum Guide>	<School Curriculum Guide>	Teacher Edition of Textbook	Student Edition of Textbook	Other Resource Books
BTBMSRC1	a) deciding which topics to teach (goals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMSRC2	b) deciding how to present a topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMSRC3	c) selecting problems and exercises for work in class and homework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMSRC4	d) selecting problems and applications for assessment and evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. In your mathematics lessons, how often do you usually ask students to do the following?

Check **one** box in each row.

		Never or almost never	Some lessons	Most lessons	Every lesson
BTBMASK1	a) explain the reasoning behind an idea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK2	b) represent and analyze relationships using tables, charts, or graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK3	c) work on problems for which there is no immediately obvious method of solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK4	d) use computers to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK5	e) write equations to represent relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK6	f) practice computational skills.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMASK7	g) use graphing calculators to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11. In mathematics lessons, how often do students...

Check one box in each row.

		<i>Never or almost never</i>	<i>Some lessons</i>	<i>Most lessons</i>	<i>Every lesson</i>
BTBMLES1	a) work individually without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLES2	b) work individually with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLES3	c) work together as a class with the teacher teaching the whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLES4	d) work together as a class with students responding to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLES5	e) work in pairs or small groups without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLES6	f) work in pairs or small groups with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. In a typical month of lessons for your mathematics class, what percentage of time is spent on each of the following activities?

Write in a percentage for each activity

The total should add to 100%

BTBMACT1	a) administrative tasks (not related to lesson's content/purpose)	_____ %
BTBMACT2	b) homework review	_____ %
BTBMACT3	c) lecture-style presentation by teacher	_____ %
BTBMACT4	d) teacher-guided student practice	_____ %
BTBMACT5	e) re-teaching and clarification of content/procedures	_____ %
BTBMACT6	f) student independent practice	_____ %
BTBMACT7	g) tests and quizzes	_____ %
BTBMACT8	h) other	_____ %

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13. The following list includes the main topics addressed by the TIMSS mathematics test. Check the response that describes when students in your mathematics class have been taught each topic.

*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	<i>Taught</i>	<i>Taught</i>	<i>Not</i>	<i>I do</i>
<i>Taught</i>	<i>1-5</i>	<i>more than 5</i>	<i>yet</i>	<i>not</i>
<i>before</i>	<i>periods</i>	<i>periods</i>	<i>taught</i>	<i>know</i>
<i>this year</i>	<i>this year</i>	<i>this year</i>	<i>taught</i>	<i>know</i>

a) Fractions and Number Sense

BTBMTB01	BTBMTT01 BTBMNT01	1) Whole numbers – including place values, factorization and operations (+, −, ×, ÷)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB02	BTBMTT02 BTBMNT02	2) Understanding and representing common fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB03	BTBMTT03 BTBMNT03	3) Computations with common fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB04	BTBMTT04 BTBMNT04	4) Understanding and representing decimal fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB05	BTBMTT05 BTBMNT05	5) Computations with decimal fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB06	BTBMTT06 BTBMNT06	6) Relationships between common and decimal fractions, ordering of fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB07	BTBMTT07 BTBMNT07	7) Rounding whole numbers and decimal fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB08	BTBMTT08 BTBMNT08	8) Estimating the results of computations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB09	BTBMTT09 BTBMNT09	9) Number lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB10	BTBMTT10 BTBMNT10	10) Computations with percentages and problems involving percentages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB11	BTBMTT11 BTBMNT11	11) Simple computations with negative numbers ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB12	BTBMTT12 BTBMNT12	12) Square roots (of perfect squares less than 144), small integer exponents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Measurement

BTBMTB13	BTBMTT13 BTBMNT13	13) Units of measurement; standard metric units...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB14	BTBMTT14 BTBMNT14	14) Reading measurement instruments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB15	BTBMTT15 BTBMNT15	15) Estimates of measurement; accuracy of measurement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB16	BTBMTT16 BTBMNT16	16) Perimeter and area of simple shapes – triangle, rectangles, and circles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB17	BTBMTT17 BTBMNT17	17) Perimeter and area of combined shapes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB18	BTBMTT18 BTBMNT18	18) Volume of rectangular solids – i.e., Volume = length × width × height	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

<i>Taught before this year</i>	<i>Taught 1-5 this year</i>	<i>Taught more than 5 periods this year</i>	<i>Not yet taught</i>	<i>I do not know</i>
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c) Geometry

BTBMTB19	BTBMTT19 BTBMNT19	19) Cartesian coordinates of points in a plane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB20	BTBMTT20 BTBMNT20	20) Coordinates of points on a given straight line .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB21	BTBMTT21 BTBMNT21	21) Simple two dimensional geometry – angles on a straight line, parallel lines, triangles and quadrilaterals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB22	BTBMTT22 BTBMNT22	22) Congruence and similarity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB23	BTBMTT23 BTBMNT23	23) Symmetry and transformations (reflection and rotation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB24	BTBMTT24 BTBMNT24	24) Visualization of three-dimensional shapes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d) Proportionality

BTBMTB25	BTBMTT25 BTBMNT25	25) Scales applied to maps and models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB26	BTBMTT26 BTBMNT26	26) Concepts of ratio and proportion; ratio and proportion problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e) Algebra

BTBMTB27	BTBMTT27 BTBMNT27	27) Number patterns and simple relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB28	BTBMTT28 BTBMNT28	28) Simple algebraic expressions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB29	BTBMTT29 BTBMNT29	29) Representing situations algebraically; formulas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB30	BTBMTT30 BTBMNT30	30) Solving simple equations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB31	BTBMTT31 BTBMNT31	31) Solving simple inequalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f) Data Representation, Analysis, and Probability

BTBMTB32	BTBMTT32 BTBMNT32	32) Representation and interpretation of data in graphs, charts, and tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB33	BTBMTT33 BTBMNT33	33) Arithmetic mean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMTB34	BTBMTT34 BTBMNT34	34) Simple probabilities – understanding and calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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14. In your view to what extent do the following limit how you teach your mathematics class?

Check one box in each row.

		<i>Not at all</i>	<i>A little</i>	<i>Quite a lot</i>	<i>A great deal</i>
BTBMLM01	a) students with different academic abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM02	b) students who come from a wide range of backgrounds, (e.g., economic, language)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM03	c) students with special needs, (e.g., hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM04	d) uninterested students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM05	e) disruptive students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM06	f) parents interested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM07	g) parents uninterested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM08	h) shortage of computer hardware	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM09	i) shortage of computer software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM10	j) shortage of other instructional equipment for students' use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM11	k) shortage of equipment for your use in demonstrations and other exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM12	l) inadequate physical facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM13	m) high student/teacher ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM14	n) low morale among fellow teachers/administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM15	o) low morale among students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMLM16	p) threat(s) to personal safety or the safety of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BTBMHMW2

15. How often do you usually assign mathematics homework?

Check *one* box.

- never
- less than once a week
- once or twice a week
- 3 or 4 times a week
- every day

If “never,” please skip ahead to Question 19.

BTBMHWMA

16. If you assign mathematics homework, how many minutes of mathematics homework do you usually assign your students?

(Consider the time it would take an average student in your class.)

Check *one* box.

- less than 15 minutes
- 15-30 minutes
- 31-60 minutes
- 61-90 minutes
- more than 90 minutes

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17. If you assign mathematics homework, how often do you assign each of the following kinds of tasks?

Check one box in each row.

		<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Always</i>
BTBMWKBR	a) worksheets or workbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMPROR	b) problem/question sets in textbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMREAR	c) reading in a textbook or supplementary materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMWRIR	d) writing definitions or other short writing assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMDATR	e) small investigation(s) or gathering data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMIEXR	f) working individually on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMGEXR	g) working as a small group on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMFINR	h) finding one or more uses of the content covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMORAR	i) preparing oral reports either individually or as a small group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBMJORR	j) keeping a journal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BTBMWHNA

18. If students are assigned written mathematics homework, how often do you do the following?

I do not assign written homework.

(Check the box and skip to the next question.)

Check **one** box in each row.

BTBMWHR1

	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Always</i>
a) record whether or not the homework was completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BTBMWHR2

b) collect, correct and keep assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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BTBMWHR3

c) collect, correct assignments and then return to students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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BTBMWHR4

d) give feedback on homework to whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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BTBMWHR5

e) have students correct their own assignments in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWHR6

f) have students exchange assignments and correct them in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWHR7

g) use it as a basis for class discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWHR8

h) use it to contribute towards students' grades or marks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

19. In assessing the work of the students in your mathematics class, how much weight do you give each of the following types of assessment?

Check **one** box in each row.

BTBMWGT1

	<i>None</i>	<i>Little</i>	<i>Quite a lot</i>	<i>A great deal</i>
a) standardized tests produced outside the school ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BTBMWGT2

b) teacher-made short answer or essay tests that require students to describe or explain their reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWGT3

c) teacher made multiple choice, true-false and matching tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWGT4

d) how well students do on homework assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWGT5

e) how well students do on projects or practical/laboratory exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWGT6

f) observations of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

BTBMWGT7

g) responses of students in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------

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20. How often do you use the assessment information you gather from students to...

Check one box in each row.

		<i>None</i>	<i>Little</i>	<i>Quite a lot</i>	<i>A great deal</i>
BTBGASS1	a) provide students' grades or marks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS2	b) provide feedback to students?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS3	c) diagnose students' learning problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS4	d) report to parents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS5	e) assign students to different programs or tracks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS6	f) plan for future lessons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Section 4


Identification Label

School ID :
 Stratum ID:
 Teacher ID: Link:
 Name:
 Class ID:
 Name of Class:
 Subject: Grade:

IEA Third International Mathematics and Science Study - Repeat

Science Teacher Questionnaire Main Survey

Your school has agreed to participate in the Third International Mathematics and Science Study - Repeat (TIMSS-R), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS-R is investigating mathematics and science achievement in about forty countries around the world. It is designed to measure and interpret differences in national education systems in order to help improve the teaching and learning of mathematics and science worldwide.

This questionnaire is addressed to teachers of science, who are asked to supply information about their academic and professional backgrounds, instructional practices, and attitudes towards teaching science. Since your class has been selected as part of a nationwide sample, your responses are very important in helping to describe science classes in <country>.

Some of the questions in this questionnaire ask about **your science class**. This is the class which is identified at the top of this page, and which will be tested as part of TIMSS-R in your school.

It is important that you answer each question carefully so that the information provided reflects your situation as accurately as possible. It is estimated that it will require approximately 60 minutes to complete this questionnaire.

Your cooperation in completing this questionnaire is greatly appreciated.

TIMSS Study Center
 Boston College
 Chestnut Hill, MA 02467
 USA

(Institute Address)

TIMSS-R Ref.No. 98-0038
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GENERAL DIRECTIONS:

1. Identify a place and a time when you will be able to complete this questionnaire without being interrupted. This questionnaire has been designed to be completed within 60 minutes by most teachers. However, the amount of time you will need may vary. To make it as easy as possible for you to respond, most items may be completed simply by checking the appropriate box.
2. There are no “right” or “wrong” answers to any of these items. The questionnaire is designed to provide information about teachers’ professional experiences, opinions, and classroom activities. **Remember, “your science class” is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS-R in your school.**
3. More specific instructions to assist you in responding are found in *italics* for each item. Once you have completed the questionnaire, place it into the return envelope provided and return it to:

<Country Specific Information>

Again, thank you for your time, effort, and thought in completing this questionnaire!

TIMSS-R Ref.No. 98-0038

THERE ARE NO QUESTIONS ON THIS PAGE

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Section A

BTBGAGE

1. How old are you?

Check one box only.

- under 25
- 25-29
- 30-39
- 40-49
- 50-59
- 60 or more

BTBGSEX

2. Are you female or male?

Check one box only.

- female
- male

BTBGTAUG

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

Please round to the nearest whole number. _____

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BTBGTOTL

4. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> in one school week altogether?

Write in number *<hours/periods>*

5. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to teach each of the following subjects?

NRC Note: <List only the generic science courses appropriate for your country.>

Count a double <hour/period> as two single <hours/periods>. Write zero if none.

Number of single <hours/periods>

BTBMSUB1

a) mathematics

BTBSSUB2

b) <GENERAL/INTEGRATED SCIENCE>

BTBSSUB3

c) <PHYSICAL SCIENCE>

BTBSSUB4

d) <EARTH SCIENCE>

BTBSSUB5

e) <LIFE SCIENCE>

BTBSSUB6

f) <BIOLOGY>

BTBSSUB7

g) <CHEMISTRY>

BTBSSUB8

h) <PHYSICS>

BTBGSUB9

i) other subjects

6. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to perform each of the following tasks?

Count a double <hour/period> as two single <hours/periods>. Write zero if none.

Number of single <hours/periods>

BTBGTSK1

a) student supervision (other than teaching)

BTBGTSK2

b) student counselling/appraisal

BTBGTSK3

c) administrative duties

BTBGTSK4

d) individual curriculum planning

BTBGTSK5

e) cooperative curriculum planning

BTBGTSK6

f) other non-student contact time (i.e., use not specified)

BTBGTSK7

g) other

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7. APPROXIMATELY how many hours per week do you normally spend on each of the following activities outside the formal school day? Do not include time already accounted for in Question # 6.

Check one box in each row.

		<i>None</i>	<i>Less than 1 hour</i>	<i>1 - 2 hours</i>	<i>3 - 4 hours</i>	<i>More than 4 hours</i>
BTBGACT1	a) preparing or grading student tests or exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT2	b) reading and grading other student work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT3	c) planning lessons by yourself.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT4	d) meeting with students outside of classroom time (e.g., tutoring, guidance).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT5	e) meeting with parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT6	f) professional reading and development activity (e.g., seminars, conferences, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT7	g) keeping students' records up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT8	h) administrative tasks including staff meetings (e.g. photocopying, displaying students' work)..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGACT9	i) other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. APPROXIMATELY how many hours per week do you normally spend on your teaching activities altogether (include time spent in and out of school)?

Please round to the nearest whole hour. _____

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BTBGMEET

9. About how often do you have meetings with other teachers in your subject area to discuss and plan curriculum or teaching approaches?

Check one box only.

- never
- once or twice a year
- every other month
- once a month
- once a week
- two or three times a week
- almost every day

10. How much influence do you have on each of the following...

Check one box in each row.

None Little Some A lot

BTBGINF1

a) subject matter to be taught

BTBGINF2

b) specific textbooks to be used

BTBGINF3

c) the amount of money to be spent on supplies

BTBGINF4

d) what supplies are purchased.....

11. To be good at science at school, how important do you think it is for students to...

Check one box in each row.

Not important Somewhat important Very important

BTBSIMP1

a) remember formulas and procedures

BTBSIMP2

b) think in a sequential and procedural manner

BTBSIMP3

c) understand science concepts, principles, and strategies

BTBSIMP4

d) be able to think creatively

BTBSIMP5

e) understand how science is used in the real world

BTBSIMP6

f) be able to provide reasons to support their conclusions

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12. To what extent do you agree or disagree with each of the following statements?

Check one box in each row.

		<i>Strongly disagree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
BTBSAGR1	a) Science is primarily an abstract subject.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR2	b) Science is primarily a formal way of representing the real world.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR3	c) Science is primarily a practical and structured guide for addressing real situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR4	d) Some students have a natural talent for science and others do not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR5	e) It is important for teachers to give students prescriptive and sequential directions for doing science experiments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR6	f) Focusing on rules is a bad idea. It gives students the impression that the sciences (physics, chemistry, biology, and earth science) are a set of procedures to be memorized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR7	g) If students get into debates in class about ideas or procedures covering the sciences, it can harm their learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR8	h) Students see a science task as the same task when it is represented in two different ways (picture, concrete material, symbol set, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSAGR9	i) A liking for and understanding of students are essential for teaching science.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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13. Indicate your familiarity with each of the following documents:

NRC Note: <Include country-specific appropriate options only.>

Check one box in each row.

		<i>No such document</i>	<i>Not familiar</i>	<i>Fairly familiar</i>	<i>Very familiar</i>
BTBSFAM1	a) <THE NATIONAL CURRICULUM GUIDE FOR SCIENCE>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFAM2	b) <THE REGIONAL CURRICULUM GUIDE(S) FOR SCIENCE>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM3	c) <THE SCHOOL CURRICULUM GUIDE>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM4	d) <THE NATIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGFAM5	e) <THE REGIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFAM6	f) <THE NATIONAL PEDAGOGY GUIDE FOR SCIENCE>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFAM7	g) <THE REGIONAL PEDAGOGY GUIDE FOR SCIENCE>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How well prepared do you feel you are to teach...

Check one box in each row.

		<i>I do not teach these topics</i>	<i>Not well prepared</i>	<i>Somewhat prepared</i>	<i>Very well prepared</i>
BTBSFP01	a) earth science – earth’s features and physical processes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP02	b) earth science – the solar system and the universe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP03	c) biology – structure and function of human systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP04	d) biology – diversity, structure, and processes of plant and animal life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP05	e) chemistry – classification and structure of matter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP06	f) chemistry – chemical reactivity and transformations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP07	g) physics – types of energy, sources of energy, conversion between energy types?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP08	h) physics – light?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP09	i) environmental and resource issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFP10	j) scientific methods and inquiry skills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BTBGEDUC

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

Check one box only.

<DID NOT COMPLETE SECONDARY SCHOOL>

<SECONDARY ONLY>

<BA OR EQUIVALENT>

<MA/PHD>

BTBGTRAC

16a. Do you have a <teacher training certificate>?

Check one box only. Yes No

BTBGYETR

16b. How many years of <pre-service teacher training> have you had?

Please round to the nearest whole number. _____

(Write in 0 (zero), if you have not had any teacher training.)

BTBGPTR

16c. If you have had <pre-service teacher training>, did you begin this training in secondary school?

Check one box only. Yes No

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BTBGCMA8

17. While studying to obtain your <BA or equivalent or teacher training certificate>, what was your major or main area of study?

I do not have a <BA or equivalent or teacher training certificate.>
 (Check the box and skip to the next question.)

Check **one** box in each row.

BTBGCMA1

a) Mathematics

BTBGCMA2

b) Biology

BTBGCMA3

c) Physics

BTBGCMA4

d) Chemistry

BTBGCMA5

e) Education

BTBGCMA6

f) Mathematics Education

BTBGCMA7

g) Science Education

BTBGCMA8

h) Other

BTBGMMA8

18. If you have a master's degree, what was your major or main area of study?

I do not have a master's degree.
 (Check the box and skip to the next question.)

Check **one** box in each row.

BTBGMMA1

a) Mathematics

BTBGMMA2

b) Biology

BTBGMMA3

c) Physics

BTBGMMA4

d) Chemistry

BTBGMMA5

e) Education

BTBGMMA6

f) Mathematics Education

BTBGMMA7

g) Science Education

BTBGMMA8

h) Other

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International Option

BTBGCARE

19. Was teaching your first choice as a career when beginning university or teacher education college?

Check only one box..... Yes No

BTBGCHNG

20. Would you change to another career if you had the opportunity?

Check only one box..... Yes No

BTBGSOAP

21. Do you think that society appreciates your work?

Check only one box..... Yes No

BTBGSTAP

22. Do you think your students appreciate your work?

Check only one box..... Yes No

BTBGBOOK

23. Approximately how many books are in your home?

(Do not count magazines or newspapers.)

Check one box only.

none or very few (0-10)

enough to fill a shelf (11-25)

enough to fill a bookcase (26-100)

enough to fill two bookcases (101-200)

enough to fill three or more bookcases (more than 200)

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THERE ARE NO QUESTIONS ON THIS PAGE

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Section B

In this section, many of the questions refer to **your science class**. Please remember that this is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS-R in your school.

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BTBSBOY
BTBSGIRL

1. How many students are in your science class?

Write in a number for each. Write 0 (zero) if there are none.

boys _____ girls _____

BTBSMEC

2. What subject matter do you emphasize most in your science class?

Check one box only.

- General/integrated science
- Earth science
- Biology
- Chemistry
- Physics
- Physical science (chemistry/physics)
- Other, please specify _____

BTBSTIME

3. How many minutes per week do you teach science to your science class?

Minutes: _____

BTBSTXBK

4a. Do you use a textbook in teaching science to your class?

Check one box.

Yes No

BTBSTXBR

4b. If yes, approximately what percentage of your weekly science teaching time is based on your science textbook?

Check one box.

- 0-25%
- 26-50%
- 51-75%
- 76-100%

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BTBSCUDL

5. Do the students in your science class have calculators available to use during science lessons?

Check one box only.

Yes No

BTBSWECF

6. To what extent are the students in your science class permitted to use calculators in science lessons?

Check one box only.

- unrestricted use
- restricted use
- calculators are not permitted

7. How often do students in your science class use calculators for the following activities?

Check one box in each row.

BTBSCAL1

a) Checking answers

BTBSCAL2

b) Tests and exams

BTBSCAL3

c) Routine computation

BTBSCAL4

d) Solving complex problems

BTBSCAL5

e) Exploring number concepts

8. Do the students in your science class have computers available to use during science lessons?

Check one box in each row.

BTBSCOM1

a) in the classroom

BTBSCOM2

b) in other instructional rooms (computer labs, science lab, reading lab, library, etc.)

If computers are available,

BTBSINT1

c) do any of the computers have access to the Internet?

BTBSINT2

d) do you use the Internet for instructional/educational purposes?

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9. In planning science lessons, what is your main source of written information when...

NRC Note: <List only country-specific appropriate options.>

Check **one** box in each row.

		<National or Regional Examination Specifications>	<National or Regional Curriculum Guide>	<School Curriculum Guide>	Teacher Edition of Textbook	Student Edition of Textbook	Other Resource Books
BTBS SRC1	a) deciding which topics to teach (goals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBS SRC2	b) deciding how to present a topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBS SRC3	c) selecting problems and exercises for work in class and homework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBS SRC4	d) selecting problems and applications for assessment and evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. In your science lessons, how often do you usually ask students to do the following?

Check **one** box in each row.

		Never or almost never	Some lessons	Most lessons	Every lesson
BTBSASK1	a) explain the reasoning behind an idea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK2	b) represent and analyze relationships using tables, charts, or graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK3	c) work on problems for which there is no immediately obvious method of solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK4	d) use computers to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK5	e) write explanations about what was observed and why it happened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK6	f) put events or objects in order and give a reason for the organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSASK7	g) use graphing calculators to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11. In science lessons, how often do students...

Check one box in each row.

		<i>Never or almost never</i>	<i>Some lessons</i>	<i>Most lessons</i>	<i>Every lesson</i>
BTBSLES1	a) work individually without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLES2	b) work individually with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLES3	c) work together as a class with the teacher teaching the whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLES4	d) work together as a class with students responding to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLES5	e) work in pairs or small groups without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLES6	f) work in pairs or small groups with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. In a typical month of lessons in your science class, what percentage of time is spent on each of the following activities?

Write in a percentage for each activity.

The total should add to 100%.

BTBSAC01	a) administrative tasks (not related to lesson's content/purpose).....	_____%
BTBSAC02	b) homework review	_____%
BTBSAC03	c) lecture-style presentation by teacher	_____%
BTBSAC04	d) teacher-guided student practice	_____%
BTBSAC05	e) re-teaching and clarification of content/procedures	_____%
BTBSAC06	f) student independent practice	_____%
BTBSAC07	g) tests and quizzes	_____%
BTBSAC08	h) teacher demonstrations of experiments	_____%
BTBSAC09	i) students conducting experiments	_____%
BTBSAC10	j) other	_____%

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13. The following list includes the main topics addressed by the TIMSS science test. Check the response that describes when students in your class have been taught each topic.

*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	<i>Taught before this year</i>	<i>Taught 1-5 periods this year</i>	<i>Taught more than 5 periods this year</i>	<i>Not yet taught</i>	<i>I do not know</i>
--	--	---	---	-------------------------------	------------------------------

a) Earth Science

BTBSTB01	BTBSTT01 BTBSNT01	1) Earth's physical features (layers, landforms, bodies of water, rocks, soil)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB02	BTBSTT02 BTBSNT02	2) Earth's atmosphere (layers, composition, temperature, pressure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB03	BTBSTT03 BTBSNT03	3) Earth processes and history (weather and climate, physical cycles, plate tectonics, fossils)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB04	BTBSTT04 BTBSNT04	4) Earth in the solar system and the universe (interactions between Earth, sun, and moon; relationship to planets and stars).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Biology

BTBSTB05	BTBSTT05 BTBSNT05	5) Human body - structure and function of organs and systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB06	BTBSTT06 BTBSNT06	6) Human bodily processes (metabolism, respiration, digestion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB07	BTBSTT07 BTBSNT07	7) Human nutrition, health, and disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB08	BTBSTT08 BTBSNT08	8) Biology of plant and animal life (diversity, structure, life processes, life cycles)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB09	BTBSTT09 BTBSNT09	9) Interactions of living things (biomes and ecosystems, interdependence)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB10	BTBSTT10 BTBSNT10	10) Reproduction, genetics, evolution, and speciation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Chemistry

BTBSTB11	BTBSTT11 BTBSNT11	11) Classification of matter (elements, compounds, solutions, mixtures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB12	BTBSTT12 BTBSNT12	12) Structure of matter (atoms, ions, molecules, crystals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB13	BTBSTT13 BTBSNT13	13) Chemical reactivity and transformations (definition of chemical change, oxidation, combustion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB14	BTBSTT14 BTBSNT14	14) Energy and chemical change (exothermic and endothermic reactions, reaction rates).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	<i>Taught before this year</i>	<i>Taught 1-5 periods this year</i>	<i>Taught more than 5 periods this year</i>	<i>Not yet taught</i>	<i>I do not know</i>
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d) Physics

BTBSTB15	BTBSTT15 BTBSNT15	15) Physical properties and physical changes of matter (weight, mass, states of matter, boiling, freezing).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB16	BTBSTT16 BTBSNT16	16) Subatomic particles (protons, electrons, neutrons)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB17	BTBSTT17 BTBSNT17	17) Energy types, sources, and conversions (chemical, kinetic, electric, light energy; work and efficiency)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB18	BTBSTT18 BTBSNT18	18) Heat and temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB19	BTBSTT19 BTBSNT19	19) Wave phenomena, sound, and vibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB20	BTBSTT20 BTBSNT20	20) Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB21	BTBSTT21 BTBSNT21	21) Electricity and magnetism.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB22	BTBSTT22 BTBSNT22	22) Forces and motion (types of forces, balanced/unbalanced forces, fluid behavior, speed, acceleration)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e) Environmental and Resource Issues

BTBSTB23	BTBSTT23 BTBSNT23	23) Pollution (acid rain, global warming, ozone layer, water pollution)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB24	BTBSTT24 BTBSNT24	24) Conservation of natural resources (land, water, forests, energy sources).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB25	BTBSTT25 BTBSNT25	25) Food supply and production, population, and environmental effects of natural and man-made events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f) Nature of Science and Scientific Inquiry Skills

BTBSTB26	BTBSTT26 BTBSNT26	26) Scientific method (formulating hypotheses, making observations, drawing conclusions, generalizing).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB27	BTBSTT27 BTBSNT27	27) Experimental design (experimental control, materials, and procedures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB28	BTBSTT28 BTBSNT28	28) Scientific measurements (reliability, replication, experimental error, accuracy, scales).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB29	BTBSTT29 BTBSNT29	29) Using scientific apparatus and conducting routine experimental operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB30	BTBSTT30 BTBSNT30	30) Gathering, organizing, and representing data (units, tables, charts, graphs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSTB31	BTBSTT31 BTBSNT31	31) Describing and interpreting data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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14. In your view to what extent do the following limit how you teach your science class?

Check one box in each row.

		<i>Not at all</i>	<i>A little</i>	<i>Quite a lot</i>	<i>A great deal</i>
BTBSLM01	a) students with different academic abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM02	b) students who come from a wide range of backgrounds, (e.g., economic, language)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM03	c) students with special needs, (e.g., hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM04	d) uninterested students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM05	e) disruptive students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM06	f) parents interested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM07	g) parents uninterested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM08	h) shortage of computer hardware	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM09	i) shortage of computer software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM10	j) shortage of other instructional equipment for students' use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM11	k) shortage of equipment for your use in demonstrations and other exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM12	l) inadequate physical facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM13	m) high student/teacher ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM14	n) low morale among fellow teachers/administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM15	o) low morale among students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSLM16	p) threat(s) to personal safety or the safety of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BTBSHMW2

15. How often do you usually assign science homework?

Check *one* box.

- never
- less than once a week
- once or twice a week
- 3 or 4 times a week
- every day

If “never,” please skip ahead to Question 19.

BTBSHMA

16. If you assign science homework, how many minutes of science homework do you usually assign your students?

(Consider the time it would take an average student in your class.)

Check *one* box.

- less than 15 minutes
- 15-30 minutes
- 31-60 minutes
- 61-90 minutes
- more than 90 minutes

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17. If you assign science homework, how often do you assign each of the following kinds of tasks?

Check one box in each row.

		<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Always</i>
BTBSWKBR	a) worksheets or workbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSPROR	b) problem/question sets in textbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSREAR	c) reading in a textbook or supplementary materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSWRIR	d) writing definitions or other short writing assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSDATR	e) small investigation(s) or gathering data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSIEXR	f) working individually on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSGEXR	g) working as a small group on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSFINR	h) finding one or more uses of the content covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSORAR	i) preparing oral reports either individually or as a small group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBSJORR	j) keeping a journal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BTBSWHNA

18. If students are assigned written science homework, how often do you do the following?

I do not assign written homework.
 (Check the box and skip to the next question.)

Check **one** box in each row.
 Never Rarely Sometimes Always

BTBSWHR1

a) record whether or not the homework was completed

BTBSWHR2

b) collect, correct and keep assignments

BTBSWHR3

c) collect, correct assignments and then return to students

BTBSWHR4

d) give feedback on homework to whole class

BTBSWHR5

e) have students correct their own assignments in class

BTBSWHR6

f) have students exchange assignments and correct them in class

BTBSWHR7

g) use it as a basis for class discussion

BTBSWHR8

h) use it to contribute towards students' grades or marks

19. In assessing the work of the students in your science class, how much weight do you give each of the following types of assessment?

Check **one** box in each row.
 None Little Quite a lot A great deal

BTBSWGT1

a) standardized tests produced outside the school ...

BTBSWGT2

b) teacher-made short answer or essay tests that require students to describe or explain their reasoning

BTBSWGT3

c) teacher made multiple choice, true-false and matching tests

BTBSWGT4

d) how well students do on homework assignments

BTBSWGT5

e) how well students do on projects or practical/laboratory exercises

BTBSWGT6

f) observations of students

BTBSWGT7

g) responses of students in class

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20. How often do you use the assessment information you gather from students to...*Check one box in each row.*

		<i>None</i>	<i>Little</i>	<i>Quite a lot</i>	<i>A great deal</i>
BTBGASS1	a) provide students' grades or marks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS2	b) provide feedback to students?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS3	c) diagnose students' learning problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS4	d) report to parents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS5	e) assign students to different programs or tracks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BTBGASS6	f) plan for future lessons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Section 5



Identification Label

Stratum ID:

School ID:

IEA Third International Mathematics and Science Study - Repeat

School Questionnaire Main Survey

Your school has been selected to participate in the Third International Mathematics and Science Study - Repeat (TIMSS-R), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS-R is investigating student achievement in mathematics and science in about forty countries around the world. It is designed to measure and interpret differences in national education systems in order to help improve the teaching and learning of mathematics and science worldwide.

This school 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 the school system 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. It is estimated that it will require approximately 45 minutes to complete this questionnaire.

When you have completed the questionnaire, please place it in the accompanying envelope and return it to:

<Insert country-specific information here>.

Your cooperation in completing this questionnaire is greatly appreciated.

TIMSS Study Center
Boston College
Chestnut Hill, MA 02467
USA

(Institute Address)

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BCBGCOMM

1. In what type of community is your school located?

Check **one** box only.

- A geographically isolated area
- Village or rural (farm) area
- One on the outskirts of a town/city
- One close to the center of a town/city

2. How many of the following are on the staff of your school?

For each type of position listed, provide the number of full-time equivalents (FTEs) present in your school. For example, one full-time (100% time) teacher represents 1 FTE; one part-time (50% time) teacher represents .5 FTE. A staff member who teaches 50% time and functions as an assistant principal for the remaining 50% represents .5 FTE teacher and .5 FTE assistant principal. Write in 0 (zero) if there are no such positions in your school.

BCBGFTE1

a) Principals **Number of FTEs**

BCBGFTE2

b) Assistant principals

BCBGFTE3

c) Department heads

BCBGFTE4

d) <Classroom teachers>

BCBGFTE5

e) Teacher aides

BCBGFTE6

f) Laboratory technicians

BCBGFTE7

g) Learning specialists

BCBGFTE8

h) Other professional staff

BCBGFTTE

3a. How many individual full-time <classroom teachers> are there in your school?

Write in a number.

BCBGPTTE

3b. How many individual part-time <classroom teachers> are there in your school?

Write in a number.

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BCBGTE5Y

4. What percentage of the <classroom teachers> have been at your school for 5 or more years?

Please indicate a percentage. Write 0 (zero) if none.

_____ %

5. How long do students in your school typically stay with the same teacher?

(For schools with more than lower secondary students, please answer for lower secondary students only.)

Check one box in each line.

		<i>One school year or less</i>	<i>Two school years</i>	<i>Three school years</i>	<i>Four or more school years</i>	<i>Not applicable</i>
BCBMTSA1	a) Mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSTSA2	b) <General/Integrated Science> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSTSA3	c) <Biology>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSTSA4	d) <Chemistry>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSTSA5	e) <Earth Science>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSTSA6	f) <Physics>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Cooperation and Collaboration:

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBGC0L1	a) Does your school have an official policy related to promoting cooperation and collaboration among teachers?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGC0L2	b) Are teachers in your school encouraged to share and discuss instructional ideas and materials?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGC0L3	c) Do teachers in your school meet regularly to discuss instructional goals and issues?	<input type="checkbox"/>	<input type="checkbox"/>

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7. As principal of this school, about how many hours per month do you usually spend on each of the following activities?

Please indicate the approximate number of whole hours for each item. Please write 0 (zero) if no time is spent on an activity.

		<i>Whole hours per month</i>
BCBGAC01	a) Hiring teachers	_____
BCBGAC02	b) Representing the school in the community	_____
BCBGAC03	c) Representing the school at official meetings	_____
BCBGAC04	d) Internal administrative tasks (e.g., regulations, school budget, timetable)	_____
BCBGAC05	e) Teaching (including preparation)	_____
BCBGAC06	f) Giving a demonstration lesson	_____
BCBGAC07	g) Discussing educational objectives with teachers	_____
BCBGAC08	h) Initiating curriculum revision and/or planning	_____
BCBGAC09	i) Talking with parents	_____
BCBGAC10	j) Counseling and disciplining of students	_____
BCBGAC11	k) Responding to requests from <district>, <state>, or <national> education officials	_____
BCBGAC12	l) Training teachers	_____
BCBGAC13	m) Professional development activities	_____
BCBGAC14	n) Other activities	_____

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8. With regard to your school, who has primary responsibility for each of the following activities?

Check one box in each line. If more than one level has responsibility, check the highest level.

		<i><Not a school responsibility></i>	<i><School's governing board></i>	<i>Principal</i>	<i><Department head></i>	<i>Teachers</i>
BCBGRP01	a) Hiring teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP02	b) Establishing disciplinary policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP03	c) Establishing student grading policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP04	d) Formulating the school budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP05	e) Purchasing supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP06	f) Placing students in classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP07	g) Assigning teachers to classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP08	h) Determining which textbooks are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP09	i) Establishing homework policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP10	j) Determining teacher salaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP11	k) Establishing community relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP12	l) Communicating with students' families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP13	m) Determining course content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGRP14	n) Deciding which courses are offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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9. How much influence do each of the following have in determining the curriculum that is taught in your school?

Check one box in each line.

		<i>None</i>	<i>A little</i>	<i>Some</i>	<i>A lot</i>
BCBGIF01	a) <National Curriculum Council>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF02	b) <National Subject Association>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF03	c) <educational region or district>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF04	d) <school governing board>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF05	e) Principal/head of school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF06	f) Teachers (collectively for the school)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF07	g) Teachers (of same subject) as a group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF08	h) Each teacher individually	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF09	i) Parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF10	j) Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF11	k) Church/religious groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF12	l) Business community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF13	m) Textbook publishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF14	n) External examinations/standardized tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGIF15	o) Teacher unions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Does your school have its own written statement of the curriculum content to be taught (i.e., other than the national or regional curriculum guides)?

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBMCURR	a) For mathematics	<input type="checkbox"/>	<input type="checkbox"/>
BCBSCURR	b) For science	<input type="checkbox"/>	<input type="checkbox"/>

11. Has your school developed instructional activities or learning materials to address the curriculum taught in your school?

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBMDVLP	a) For mathematics	<input type="checkbox"/>	<input type="checkbox"/>
BCBSDVLP	b) For science	<input type="checkbox"/>	<input type="checkbox"/>

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12. Is your school's capacity to provide instruction affected by a shortage or inadequacy of any of the following?

Check one box in each line.

		<i>None</i>	<i>A little</i>	<i>Some</i>	<i>A lot</i>
BCBGST01	a) Instructional materials (e.g., textbooks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGST02	b) Budget for supplies (e.g., paper, pencils)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGST03	c) School buildings and grounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGST04	d) Heating/cooling and lighting systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGST05	e) Instructional space (e.g., classrooms)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGST06	f) Special equipment for handicapped students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMST07	g) Computers for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMST08	h) Computer software for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMST09	i) Calculators for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMST10	j) Library materials relevant to mathematics instruction.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMST11	k) Audio-visual resources for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST12	l) Science laboratory equipment and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST13	m) Computers for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST14	n) Computer software for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST15	o) Calculators for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST16	p) Library materials relevant to science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST17	q) Audio-visual resources for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST18	r) Teachers qualified to teach mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST19	s) Teachers qualified to teach <General/Integrated Science>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST20	t) Teachers qualified to teach <Biology>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST21	u) Teachers qualified to teach <Chemistry>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST22	v) Teachers qualified to teach <Earth Science>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSST23	w) Teachers qualified to teach <Physics>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The students in your school:

Write in the answer for each of the following. Write 0 (zero) if there are none.

		<i>Boys</i>	<i>Girls</i>
BCBGBENR BCBGGENR BCBGABST	a) What is the total school enrollment (number of students)?	_____	_____
	b) On a typical school day, what percentage of students are absent from school for any reason?	_____	%
BCBGENDY	c) About what percentage of students who begin the year in your school also finish the year in your school?	_____	%
BCBGTNSF	d) What percentage of the students in your school transfer into your school after the beginning of the school year?	_____	%

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ALL remaining questions refer to <U-GRADE> students in your school.

14. Concerning <U-GRADE> students...

		<i>Boys</i>	<i>Girls</i>
BCBGUBER BCBGUGER	a) How many students are in <U-GRADE>?	_____	_____
BCBGUBRT BCBGUGRT	b) How many students in <U-GRADE> are repeating the grade?	_____	_____
BCBGUSIZ	c) What is the approximate average class size in <U-GRADE>?	_____	
BCBGUMGR	d) How many <U-GRADE> students are in multi-grade classrooms?	_____	

15a. What is the total number of computers in your school that can be used by students in <U-GRADE> for instructional activities?

*Number
of computers
for students*

15b. In addition to the computers indicated above, how many other computers can be used by <U-GRADE> teachers (not students) for instructional purposes?

*Number
of computers
for teachers*

15c. TOTAL number of computers that can be used for instructional purposes by either students or teachers.

Add the numbers indicated in parts a and b.

*Total number
of computers*

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BCBGIACC

16. Does your school have access to the Internet for instructional/educational purposes?

Check one box only.

Yes No

If no,

BCBGACPL

a) Is your school planning to get Internet access? Yes No

BCBGACYE

b) If yes to (a), when do you expect the school to get Internet access? .. _____ year

(Skip to Question 17.)

If yes,

Check one box in each line.

	<i>None</i>	<i>1 to 25%</i>	<i>26 to 50%</i>	<i>51 to 75%</i>	<i>76 to 100%</i>
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BCBGNAC2

c) What percentage of the computers listed in Question 15 have access to e-mail?

BCBGNAC3

d) What percentage have access to the World Wide Web?

Has your school <or school system> made any of the following materials available on the World Wide Web?

Check one box in each line.

Yes No

BCBGWBI1

e) information about the school

BCBGWBI2

f) mathematics curriculum guidelines

BCBGWBI3

g) science curriculum guidelines

BCBGWBI4

h) mathematics instructional activities

BCBGWBI5

i) science instructional activities

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17a. About how often does the school administration or staff have to deal with the following behaviors among <U-GRADE> students?

17b. To what extent do these behaviors present a problem in your school?

Check one box for Frequency and one box for Severity on each line.

		Frequency in your school					Severity of Problem in your school		
		Never	Rarely	Monthly	Weekly	Daily	Not a problem	Minor problem	Serious problem
BCBGUF01 BCBGUS01	a) arriving late at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF02 BCBGUS02	b) absenteeism (i.e., unjustified absences)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF03 BCBGUS03	c) skipping class <hours/periods> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF04 BCBGUS04	d) violating dress code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF05 BCBGUS05	e) classroom disturbance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF06 BCBGUS06	f) cheating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF07 BCBGUS07	g) profanity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF08 BCBGUS08	h) vandalism.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF09 BCBGUS09	i) theft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF10 BCBGUS10	j) intimidation or verbal abuse of other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF11 BCBGUS11	k) physical injury to other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF12 BCBGUS12	l) intimidation or verbal abuse of teachers or staff.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF13 BCBGUS13	m) physical injury to teachers or staff.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF14 BCBGUS14	n) <tobacco use/possession>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF15 BCBGUS15	o) <alcohol use/possession>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF16 BCBGUS16	p) <illegal drug use/possession>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF17 BCBGUS17	q) <weapon use/possession>.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBGUF18 BCBGUS18	r) <inappropriate sexual behavior>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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18. For the <U-GRADE> students in your school:

- BCBGUDYY a) How many instructional days are in the school year? _____ *days*
- BCBGUFLW b) How many **full** instructional days (over 4 hours) are there in the school week (typical calendar week from Monday through Sunday)? _____ *days*
- BCBGUHFV c) How many **half** instructional days (4 hours or less) are there in the school week? _____ *half days*
- BCBGUTHW d) How many hours (60-minute hours) **in total** are there in the school week? (*include lunch breaks, study hall time, and after school activities*) _____ *hours*
- BCBGUIHW e) How many hours (60-minute hours) of **instruction** are there in the school week? (*exclude lunch breaks, study hall time, and after school activities*) _____ *hours*

19. Is the school week divided into instructional <hours/periods> for your <U-GRADE> students?

Check one.

Yes **No**

If yes,

- BCBGUPDW a) How many **instructional** periods are there in a school week (typical calendar week from Monday through Sunday)? _____ *periods*
- BCBGUTMP b) How many minutes is a typical instructional period? _____ *minutes*

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20. Schools sometimes organize instruction differently for students with different abilities and interests in mathematics. Which of the following does your school do for students in the <U-GRADE>?

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBMODF1	a) All classes study similar content, but at different levels of difficulty (e.g., setting or streaming)	<input type="checkbox"/>	<input type="checkbox"/>
BCBMODF2	b) Students are grouped by ability within their mathematics classes. .	<input type="checkbox"/>	<input type="checkbox"/>
BCBMODF3	c) Enrichment mathematics is offered.	<input type="checkbox"/>	<input type="checkbox"/>
BCBMODF4	d) Remedial mathematics is offered.....	<input type="checkbox"/>	<input type="checkbox"/>
BCBMODF5	e) Different classes study different content or sets of mathematics topics (i.e, students are tracked).	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUC3	If yes to (e), how many courses or tracks are there? _____ <i>number of courses/tracks</i>		

21. If all students do not follow the same course of study in mathematics, how important are each of the following factors in deciding which courses of study in mathematics a <U-GRADE> student takes?

Check one box in each line.

		<i>Not important</i>	<i>Somewhat important</i>	<i>Moderately important</i>	<i>Very important</i>	<i>Not applicable</i>
BCBMUFC1	a) academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC2	b) performance on a standardized test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC3	c) performance on an entrance examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC4	d) performance on an oral examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC5	e) teacher recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC6	f) parental wishes.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC7	g) the student's own wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBMUFC8	h) curricular requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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22. Schools sometimes organize instruction differently for students with different abilities and interests in science. Which of the following does your school do for students in the <U-GRADE>?

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBSODF1	a) All classes study similar content, but at different levels of difficulty (e.g., setting or streaming)	<input type="checkbox"/>	<input type="checkbox"/>
BCBSODF2	b) Students are grouped by ability within their science classes.	<input type="checkbox"/>	<input type="checkbox"/>
BCBSODF3	c) Enrichment science is offered.	<input type="checkbox"/>	<input type="checkbox"/>
BCBSODF4	d) Remedial science is offered.	<input type="checkbox"/>	<input type="checkbox"/>
BCBSODF5	e) Different classes study different content or sets of science topics (i.e, students are tracked).	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUC3	If yes to (e), how many courses or tracks are there? _____ <i>number of courses/tracks</i>		

23. If all students do not follow the same course of study in science, how important are each of the following factors in deciding which courses of study in science a <U-GRADE> student takes?

Check one box in each line.

		<i>Not important</i>	<i>Somewhat important</i>	<i>Moderately important</i>	<i>Very important</i>	<i>Not applicable</i>
BCBSUFC1	a) academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC2	b) performance on a standardized test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC3	c) performance on an entrance examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC4	d) performance on an oral examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC5	e) teacher recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC6	f) parental wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC7	g) the student's own wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BCBSUFC8	h) curricular requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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24. On what basis are pupils admitted to your school?

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBGBS01	a) residence in a particular area	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS02	b) student's academic performance	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS03	c) interview with student.....	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS04	d) interview with parent(s)	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS05	e) preference given to students with older brothers or sisters in the school	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS06	f) preference given according to date of application	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS07	g) recommendation of previous teachers	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS08	h) preference given to students from a particular school	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS09	i) preference given to children of former students	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS10	j) performance on a standardized test.....	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS11	k) performance on an entrance examination	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS12	l) performance on an oral examination	<input type="checkbox"/>	<input type="checkbox"/>
BCBGBS13	m) other	<input type="checkbox"/>	<input type="checkbox"/>

25. Based on your experience, does your school expect parents to...

Check one box in each line.

		<i>Yes</i>	<i>No</i>
BCBGEP01	a) notify the school about any problems their child may be having at home or with classmates?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP02	b) serve as teacher aides in the classroom?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP03	c) raise funds for the school?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP04	d) volunteer for school projects and programs?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP05	e) be sure that their child completes his/her homework?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP06	f) assist teachers on trips?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP07	g) prepare their child's lunchbox?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP08	h) patrol the grounds of the school to monitor student behavior?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP09	i) serve on committees which select school personnel?	<input type="checkbox"/>	<input type="checkbox"/>
BCBGEP10	j) serve on committees which review school finances?	<input type="checkbox"/>	<input type="checkbox"/>

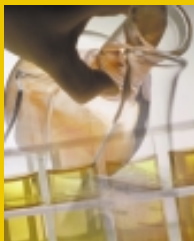
**THANK YOU for your thought, time, and effort in
answering these questions.**



The
International Association
for the Evaluation of
Educational Achievement



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International
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