

TIMSS



Supplement

International Versions of the Background Questionnaires Population 1

User Guide for the TIMSS
International Database

Primary and Middle School Years – 1995 Assessment

Third
International
Mathematics
and
Science
Study

Supplement 1

International Versions of the Background Questionnaires – Population 1

Overview

This supplement contains the international versions of the Population 1 background questionnaires in the following three sections:

- Section 1: Student Background Questionnaire (SQ1)
- Section 2: Teacher Background Questionnaire (TQ1)
- Section 3: School Background Questionnaire (SCQ1)

Tables S1.1, S1.2, and S1.3 list all of the international background variables corresponding to each of the student, teacher, and school background questionnaire items.

The international versions of the questionnaires were designed to provide an opportunity for individual countries to make modifications to some questions or response options in order 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 NRCs 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:

- 1) NRC NOTE:
- 2) <International Option> (indicating that the NRC was to substitute, if necessary, an appropriate national option that would retain the same basic interpretation as the international version)

Documentation of any national adaptations of the student, teacher, and school background questionnaire items is included in Supplement 3 to provide the user with information required to evaluate the availability of internationally-comparable data for use in secondary analyses involving the TIMSS contextual variables.

Table S1.1**Index of International Background Variables for the Population 1 Student Questionnaire Items**

Questionnaire Location	Variable Name	Description
SQ1-1/1	ASBGBIRD	On what date were you born (day)?
SQ1-1/2	ASBGBIRM	On what date were you born (month)?
SQ1-1/3	ASBGBIRY	On what date were you born (year)?
SQ1-2	ASBGSEX	Are you a girl or a boy?
SQ1-3A	ASBGBRN1	Were you born in <country>?
SQ1-3B	ASBGBRN2	How old were you when you came to <country>?
SQ1-4	ASBGLANG	How often do you speak <language of test> at home?
SQ1-5A	ASBMEXTR	Outside of school do you ever have extra lessons in mathematics?
SQ1-5B	ASBSEXTR	Outside of school do you ever have extra lessons in science?
SQ1-5C	ASBGCLUB	Outside of school do you ever participate in science or mathematics clubs?
SQ1-6A	ASBGDAY1	On a normal school day, how much time do you spend watching television and videos?
SQ1-6B	ASBGDAY2	On a normal school day, how much time do you spend playing computer games?
SQ1-6C	ASBGDAY3	On a normal school day, how much time do you spend playing/talking w/friends outside school?
SQ1-6D	ASBGDAY4	On a normal school day, how much time do you spend doing jobs at home?
SQ1-6E	ASBGDAY5	On a normal school day, how much time do you spend playing sports?
SQ1-6F	ASBGDAY6	On a normal school day, how much time do you spend reading a book for enjoyment?
SQ1-6G	ASBMDAY7	On a normal school day, how much time do you spend studying mathematics or doing mathematics homework?
SQ1-6H	ASBSDAY8	On a normal school day, how much time do you spend studying science or doing science homework?
SQ1-6I	ASBGDAY9	How much time/day do you spend studying or doing homework for classes besides mathematics and science?
SQ1-7A	ASBGADU1	Does your mother live at home with you?
SQ1-7B	ASBGADU2	Does your father live at home with you?
SQ1-7C	ASBGADU3	Do any brothers live at home with you?
SQ1-7D	ASBGADU4	Do any sisters live at home with you?
SQ1-7E	ASBGADU5	Do you have a stepmother who lives with you?
SQ1-7F	ASBGADU6	Do you have a stepfather who lives with you?
SQ1-7G	ASBGADU7	Do any grandparents live at home with you?
SQ1-7H	ASBGADU8	Do any other relatives live at home with you?
SQ1-7I	ASBGADU9	Do any non-relatives live at home with you?
SQ1-8	ASBGHOME	Altogether, how many people live in your home?
SQ1-9A	ASBGBRNM	Was your mother born in <country>?
SQ1-9B	ASBGBRNF	Was your father born in <country>?
SQ1-10	ASBGBOOK	About how many books are there in your home?
SQ1-11A	ASBGPS01	Do you have a calculator at your home?
SQ1-11B	ASBGPS02	Do you have a computer at your home?
SQ1-11C	ASBGPS03	Do you have a study desk at home for your own use?
SQ1-11D	ASBGPS04	Do you have a dictionary at your home?
SQ1-11E	ASBGPS05	Do you have a <country specific> at your home?
SQ1-11F	ASBGPS06	Do you have a <country specific> at your home?
SQ1-11G	ASBGPS07	Do you have a <country specific> at your home?
SQ1-11H	ASBGPS08	Do you have a <country specific> at your home?
SQ1-11I	ASBGPS09	Do you have a <country specific> at your home?
SQ1-11J	ASBGPS10	Do you have a <country specific> at your home?
SQ1-11K	ASBGPS11	Do you have a <country specific> at your home?
SQ1-11L	ASBGPS12	Do you have a <country specific> at your home?
SQ1-11M	ASBGPS13	Do you have a <country specific> at your home?
SQ1-11N	ASBGPS14	Do you have a <country specific> at your home?

Table S1.1**Index of International Background Variables for the Population 1 Student Questionnaire Items (Continued)**

Questionnaire Location	Variable Name	Description
SQ1-11O	ASBGPS15	Do you have a <country specific> at your home?
SQ1-11P	ASBGPS16	Do you have a <country specific> at your home?
SQ1-12A	ASBSMIP1	Does your mother think it is important for you to do well in science at school?
SQ1-12B	ASBMMIP2	Does your mother think it is important for you to do well in mathematics at school?
SQ1-12C	ASBGMIP3	Does your mother think it is important for you to be good at sports?
SQ1-12D	ASBGMIP4	Does your mother think it is important for you to have time to have fun?
SQ1-13A	ASBSFIP1	Do most of your friends think it is important for you to do well in science at school?
SQ1-13B	ASBMFIP2	Do most of your friends think it is important for you to do well in mathematics at school?
SQ1-13C	ASBGFIP3	Do most of your friends think it is important for you to be good at sports?
SQ1-13D	ASBGFIP4	Do most of your friends think it is important for you to have time to have fun?
SQ1-14A	ASBSSIP1	Do you think it is important for you to do well in science at school?
SQ1-14B	ASBMSIP2	Do you think it is important for you to do well in mathematics at school?
SQ1-14C	ASBGSIP3	Do you think it is important for you to be good at sports?
SQ1-14D	ASBGSIP4	Do you think it is important for you to have time to have fun?
SQ1-15A	ASBMGOOD	I usually do well in mathematics
SQ1-15B	ASBSGOOD	I usually do well in science.
SQ1-16A	ASBGSSTL	In the last month, was something of yours stolen?
SQ1-16B	ASBGSHRT	In the last month, did you think another student might hurt you?
SQ1-16C	ASBGFSTL	In the last month, was something stolen from a friend of yours?
SQ1-16D	ASBGFHRT	In the last month, did any of your friends think another student might hurt them?
SQ1-17A	ASBMDOW1	To do well in mathematics, you need lots of natural ability.
SQ1-17B	ASBMDOW2	To do well in mathematics, you need good luck.
SQ1-17C	ASBMDOW3	To do well in mathematics, you need lots of hard work studying at home.
SQ1-17D	ASBMDOW4	To do well in mathematics, you need to memorize the textbook or notes.
SQ1-18A	ASBSDOW1	To do well in science you need lots of natural ability.
SQ1-18B	ASBSDOW2	To do well in science you need good luck.
SQ1-18C	ASBSDOW3	To do well in science you need lots of hard work studying at home.
SQ1-18D	ASBSDOW4	To do well in science you need to memorize the textbook or notes.
SQ1-19A	ASBMLIKE	How much do you like mathematics?
SQ1-19B	ASBSLIKE	How much do you like science?
SQ1-20A	ASBMCMLK	How much do you like using computers in mathematics?
SQ1-20B	ASBSCMLK	How much do you like using computers in science?
SQ1-21A	ASBMENJY	Do you think that you enjoy learning mathematics?
SQ1-21B	ASBMBORE	Do you think that mathematics is boring?
SQ1-21C	ASBMEASY	Do you think that mathematics is an easy subject?
SQ1-21D	ASBSENJY	Do you think that you enjoy learning science?
SQ1-21E	ASBSBORE	Do you think that science is boring?
SQ1-21F	ASBSEASY	Do you think that science is an easy subject?
SQ1-22A	ASBMPROB	How often does the teacher show how to do mathematics problems in your mathematics lesson?
SQ1-22B	ASBMNOTE	How often do you copy notes from the board in your mathematics lesson?
SQ1-22C	ASBMTEST	How often do you have a quiz or test in your mathematics lesson?
SQ1-22D	ASBMWSHT	How often do you work from worksheets or textbooks alone in your mathematics lesson?
SQ1-22E	ASBMPROJ	How often do you work on mathematics projects in your mathematics lesson?
SQ1-22F	ASBMCALC	How often do you use calculators in your mathematics lesson?
SQ1-22G	ASBMCOMP	How often do you use computers in your mathematics lesson?
SQ1-22H	ASBMGRP	How often do you work together in pairs or small groups in your mathematics lesson?

Table S1.1**Index of International Background Variables for the Population 1 Student Questionnaire Items (Continued 2)**

Questionnaire Location	Variable Name	Description
SQ1-22M	ASBMHWFC	How often do you check each other's homework in your mathematics lesson?
SQ1-22N	ASBMHWDS	How often do you discuss completed homework in your mathematics lesson?
SQ1-23A	ASBSPROB	How often does the teacher show how to do science problems in your science lesson?
SQ1-23B	ASBSNOTE	How often do you copy notes from the board in your science lesson?
SQ1-23C	ASBSTEST	How often do you have a quiz or test in your science lesson?
SQ1-23D	ASBSPROJ	How often do you work on science projects in your science lesson?
SQ1-23E	ASBSWSHT	How often do you work from worksheets or textbooks alone in your science lesson?
SQ1-23F	ASBSCALC	How often do you use calculators in your science lesson?
SQ1-23G	ASBSCOMP	How often do you use computers in your science lesson?
SQ1-23H	ASBSEVLF	How often do you use things from life to solve problems in your science lesson?
SQ1-23I	ASBSSGRP	How often do you work together in pairs or small groups in your science lesson?
SQ1-23J	ASBSHWGV	How often does the teacher give homework in your science lesson?
SQ1-23K	ASBSHWCL	How often do you begin homework in class in your science lesson?
SQ1-23L	ASBSHWTC	How often does the teacher check homework in your science lesson?
SQ1-23M	ASBSHWFC	How often do you check each other's homework in your science lesson?
SQ1-23N	ASBSHWDS	How often do you discuss completed homework in your science lesson?
SQ1-23O	ASBSDEMO	How often does the teacher demonstrate an experiment in your science lesson?
SQ1-23P	ASBSEXPR	How often do you do an experiment in your science lesson?
SQ1-24A	ASBGACT1	How often do you read a book or magazine?
SQ1-24B	ASBGACT2	How often do you visit a museum or art exhibition?
SQ1-24C	ASBGACT3	How often do you attend a concert?
SQ1-24D	ASBGACT4	How often do you go to the theatre?
SQ1-24E	ASBGACT5	How often do you go to the movies
SQ1-25A	ASBGNEWS	How often do you watch news or documentaries on television or video?
SQ1-25B	ASBGOPER	How often do you watch opera, ballet, or classical music programs on television or video?
SQ1-25C	ASBGNATR	How often do you watch nature, wildlife, or history programs on television or video?
SQ1-25D	ASBGPOPU	How often do you watch popular music programs on television or video?
SQ1-25E	ASBGSPRT	How often do you watch sports programs on television or video?
SQ1-25F	ASBGVIDE	How often do you watch video games on television or video?
SQ1-25G	ASBGCRTN	How often do you watch cartoons on television or video?
SQ1-25H	ASBGCMDY	How often do you watch comedy, adventure, or suspense programs on television or video?

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items**

Questionnaire Location	Variable Name	Description
TQ1-1	ATBGAGE	How old are you?
TQ1-2	ATBGSEX	Are you female or male?
TQ1-3	ATBGEDUC	What is the highest level of formal education you have completed?
TQ1-4	ATBMTEAC	Do not teach mathematics this year.
TQ1-4A	ATBMGRPK	Are you teaching mathematics at the pre-kindergarten level this year?
TQ1-4B	ATBMGRK	Are you teaching mathematics at the kindergarten level this year?
TQ1-4C	ATBMGR1	Are you teaching mathematics at the 1st grade level this year?
TQ1-4D	ATBMGR2	Are you teaching mathematics at the 2nd grade level this year?
TQ1-4E	ATBMGR3	Are you teaching mathematics at the 3rd grade level this year?
TQ1-4F	ATBMGR4	Are you teaching mathematics at the 4th grade level this year?
TQ1-4G	ATBMGR5	Are you teaching mathematics at the 5th grade level this year?
TQ1-4H	ATBMGR6	Are you teaching mathematics at the 6th grade level this year?
TQ1-4I	ATBMGR7	Are you teaching mathematics at the 7th grade level this year?
TQ1-4J	ATBMGR8	Are you teaching mathematics at the 8th grade level this year?
TQ1-4K	ATBMGR9	Are you teaching mathematics at the 9th grade level this year?
TQ1-4L	ATBMGR10	Are you teaching mathematics at the 10th grade level this year?
TQ1-4M	ATBMGR11	Are you teaching mathematics at the 11th grade level this year?
TQ1-4N	ATBMGR12	Are you teaching mathematics at the 12th grade level this year?
TQ1-4O	ATBMGR13	Are you teaching mathematics at the 13th grade level this year?
TQ1-5	ATBSTEAC	Do not teach science this year.
TQ1-5A	ATBSGRPK	Are you teaching science at the pre-kindergarten level this year?
TQ1-5B	ATBSGRK	Are you teaching science at the kindergarten level this year?
TQ1-5C	ATBSGR1	Are you teaching science at the 1st grade level this year?
TQ1-5D	ATBSGR2	Are you teaching science at the 2nd grade level this year?
TQ1-5E	ATBSGR3	Are you teaching science at the 3rd grade level this year?
TQ1-5F	ATBSGR4	Are you teaching science at the 4th grade level this year?
TQ1-5G	ATBSGR5	Are you teaching science at the 5th grade level this year?
TQ1-5H	ATBSGR6	Are you teaching science at the 6th grade level this year?
TQ1-5I	ATBSGR7	Are you teaching science at the 7th grade level this year?
TQ1-5J	ATBSGR8	Are you teaching science at the 8th grade level this year?
TQ1-5K	ATBSGR9	Are you teaching science at the 9th grade level this year?
TQ1-5L	ATBSGR10	Are you teaching science at the 10th grade level this year?
TQ1-5M	ATBSGR11	Are you teaching science at the 11th grade level this year?
TQ1-5N	ATBSGR12	Are you teaching science at the 12th grade level this year?
TQ1-5O	ATBSGR13	Are you teaching science at the 13th grade level this year?
TQ1-6	ATBGPTFT	Do you teach part-time or full-time?
TQ1-7	ATBGTAUG	By the end of this year, how many years will you have been teaching?
TQ1-8A	ATBGGRPK	Have you taught at the pre-kindergarten level in the past five years?
TQ1-8B	ATBGGRK	Have you taught at the kindergarten level in the past five years?
TQ1-8C	ATBGGR1	Have you taught at the 1st grade level in the past five years?
TQ1-8D	ATBGGR2	Have you taught at the 2nd grade level in the past five years?
TQ1-8E	ATBGGR3	Have you taught at the 3rd grade level in the past five years?
TQ1-8F	ATBGGR4	Have you taught at the 4th grade level in the past five years?
TQ1-8G	ATBGGR5	Have you taught at the 5th grade level in the past five years?
TQ1-8H	ATBGGR6	Have you taught at the 6th grade level in the past five years?
TQ1-8I	ATBGGR7	Have you taught at the 7th grade level in the past five years?

Table S1.2
Index of International Background Variables for the Population 1 Teacher Questionnaire Items (Continued)

Questionnaire Location	Variable Name	Description
TQ1-8J	ATBGGR8	Have you taught at the 8th grade level in the past five years?
TQ1-8K	ATBGGR9	Have you taught at the 9th grade level in the past five years?
TQ1-8L	ATBGGR10	Have you taught at the 10th grade level in the past five years?
TQ1-8M	ATBGGR11	Have you taught at the 11th grade level in the past five years?
TQ1-8N	ATBGGR12	Have you taught at the 12th grade level in the past five years?
TQ1-8O	ATBGGR13	Have you taught at the 13th grade level in the past five years?
TQ1-9A	ATBGACT1	How many hours outside the school day do you spend per week preparing or grading exams?
TQ1-9B	ATBGACT2	How many hours outside the school day do you spend per week grading other work?
TQ1-9C	ATBGACT3	How many hours outside the school day do you spend per week planning lessons?
TQ1-9D	ATBGACT4	How many hours outside the school day do you spend per week meeting with students?
TQ1-9E	ATBGACT5	How many hours outside the school day do you spend per week meeting with parents?
TQ1-9F	ATBGACT6	How many hours outside the school day do you spend per week in professional development?
TQ1-9G	ATBGACT7	How many hours outside the school day do you spend per week keeping records?
TQ1-9H	ATBGACT8	How many hours outside the school day do you spend per week on administrative tasks?
TQ1-10	ATBGMEET	How often do you meet with other teachers to discuss curriculum or teaching issues?
TQ1-11A	ATBMIMP1	To be good in math, how important is it to remember formulas and procedures?
TQ1-11B	ATBMIMP2	To be good in math, how important is it to think in a sequential & procedural manner?
TQ1-11C	ATBMIMP3	To be good in math, how important is it to understand mathematical concepts?
TQ1-11D	ATBMIMP4	To be good in math, how important is it to think creatively?
TQ1-11E	ATBMIMP5	To be good in math, how important is it to understand real world use?
TQ1-11F	ATBMIMP6	To be good in math, how important is it to be able to provide reasons to support solutions?
TQ1-12A	ATBMAGR1	Mathematics is primarily an abstract subject.
TQ1-12B	ATBMAGR2	Mathematics is primarily a formal way of representing the real world.
TQ1-12C	ATBMAGR3	Mathematics is primarily a practical and structured guide for addressing real situations.
TQ1-12D	ATBMAGR4	If students have difficulty, give them more practice by themselves in class.
TQ1-12E	ATBMAGR5	Some students have a natural talent for mathematics and others do not.
TQ1-12F	ATBMAGR6	More than one representation should be used in teaching a mathematics topic.
TQ1-12G	ATBMAGR7	Mathematics should be learned as sets of algorithms that cover all possibilities.
TQ1-12H	ATBMAGR8	Basic computational skills are sufficient for teaching <primary school> mathematics.
TQ1-12I	ATBMAGR9	A liking for and understanding of students are essential for teaching mathematics.
TQ1-13A	ATBMFAM1	How familiar are you with the <national curriculum guide for mathematics>?
TQ1-13B	ATBSFAM2	How familiar are you with the <national curriculum guide for science>?
TQ1-13C	ATBGFAM3	How familiar are you with the <regional curriculum guide>?
TQ1-13D	ATBGFAM4	How familiar are you with the <school curriculum guide>?
TQ1-13E	ATBGFAM5	How familiar are you with the <national examination specifications>?
TQ1-13F	ATBGFAM6	How familiar are you with the <regional examination specifications>?
TQ1-13G	ATBMFAM7	How familiar are you with the <national pedagogy guide for mathematics>?
TQ1-13H	ATBSFAM8	How familiar are you with the <national pedagogy guide for science>?
TQ1-14A	ATBGBOY	How many boys are in your class?
TQ1-14B	ATBGGIRL	How many girls are in your class?
TQ1-15A	ATBGACH1	What percent of your students are in the top third nationally?
TQ1-15B	ATBGACH2	What percent of your students are in the middle third nationally?
TQ1-15C	ATBGACH3	What percent of your students are in the bottom third nationally?
TQ1-16	ATBMTIME	How many minutes per week do you teach mathematics to your class?
TQ1-17	ATBMTXBK	Do you use a textbook in teaching mathematics to your class?
TQ1-17/1A	ATBMTXB0	Do you use <text> in your class?

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 2)**

Questionnaire Location	Variable Name	Description
TQ1-17/1B	ATBMTXB1	Do you use <text> in your class?
TQ1-17/1C	ATBMTXB2	Do you use <text> in your class?
TQ1-17/1D	ATBMTXB3	Do you use <text> in your class?
TQ1-17/1E	ATBMTXB4	Do you use <text> in your class?
TQ1-17/1F	ATBMTXB5	Do you use <text> in your class?
TQ1-17/1G	ATBMTXB6	Do you use <text> in your class?
TQ1-17/1H	ATBMTXB7	Do you use <text> in your class?
TQ1-17/1I	ATBMTXB8	Do you use <text> in your class?
TQ1-17/1J	ATBMTXB9	Do you use <text> in your class?
TQ1-17/2	ATBMTXNM	Name of textbook:
TQ1-18	ATBMTXBS	What percentage of your teaching time is based on the text?
TQ1-19	ATBMDIVC	Do you divide your class into groups for teaching mathematics?
TQ1-20A	ATBGLM01	Is your teaching limited by students with different academic abilities?
TQ1-20B	ATBGLM02	Is your teaching limited by students from a wide range of backgrounds?
TQ1-20C	ATBGLM03	Is your teaching limited by students with special needs?
TQ1-20D	ATBGLM04	Is your teaching limited by uninterested students?
TQ1-20E	ATBGLM05	Is your teaching limited by disruptive students?
TQ1-20F	ATBGLM06	Is your teaching limited by parents interested in their children's progress?
TQ1-20G	ATBGLM07	Is your teaching limited by parents uninterested in their children's progress?
TQ1-20H	ATBGLM08	Is your teaching limited by shortage of computer hardware?
TQ1-20I	ATBGLM09	Is your teaching limited by shortage of computer software?
TQ1-20J	ATBGLM10	Is your teaching limited by shortage of other instructional equipment for student use?
TQ1-20K	ATBGLM11	Is your teaching limited by shortage of equipment for demonstrations?
TQ1-20L	ATBGLM12	Is your teaching limited by inadequate physical facilities?
TQ1-20M	ATBGLM13	Is your teaching limited by high student/teacher ratio?
TQ1-20N	ATBGLM14	Is your teaching limited by low morale among fellow teachers/administrators?
TQ1-20O	ATBGLM15	Is your teaching limited by low morale among students?
TQ1-20P	ATBGLM16	Is your teaching limited by threats to personal safety or students' safety?
TQ1-21	ATBMCALC	How many of your students have access to calculators during mathematics lessons?
TQ1-22A	ATBGCAL1	How often do your students use calculators for checking answers?
TQ1-22B	ATBGCAL2	How often do your students use calculators for tests?
TQ1-22C	ATBGCAL3	How often do your students use calculators for routine computation?
TQ1-22D	ATBGCAL4	How often do your students use calculators for solving complex problems?
TQ1-22E	ATBGCAL5	How often do your students use calculators for exploring number concepts?
TQ1-23A	ATBMRLY1	In planning mathematics lessons, how much do you rely on previously prepared lessons?
TQ1-23B	ATBMRLY2	In planning mathematics lessons, how much do you rely on a plan made by teachers in the school?
TQ1-23C	ATBMRLY3	In planning mathematics lessons, how much do you rely on other specialists in your school?
TQ1-23D	ATBMRLY4	In planning mathematics lessons, how much do you rely on student textbooks?
TQ1-23E	ATBMRLY5	In planning mathematics lessons, how much do you rely on other resource books?
TQ1-23F	ATBMRLY6	In planning mathematics lessons, how much do you rely on teacher guides?
TQ1-23G	ATBMRLY7	In planning mathematics lessons, how much do you rely on external examinations?
TQ1-24A	ATBMSRC1	What is your main source when deciding which topics to teach?
TQ1-24B	ATBMSRC2	What is your main source when deciding how to present a topic?
TQ1-24C	ATBMSRC3	What is your main source when selecting practice exercises?
TQ1-24D	ATBMSRC4	What is your main source when selecting exercises for assessment?
TQ1-25A	ATBMTA	How many periods have you spent teaching whole numbers this year?

Table S1.2**Index of International Background Variables for the Population 1 Teacher Questionnaire Items (Continued 3)**

Questionnaire Location	Variable Name	Description
TQ1-25AA	ATBMTAA	Will teach whole numbers later this year.
TQ1-25AB	ATBMTAB	Whole numbers are not taught this year.
TQ1-25AC	ATBMTAC	Whole numbers were taught in a previous year.
TQ1-25A1	ATBMTA1	How many periods have you spent teaching place values this year?
TQ1-25A1A	ATBMTA1A	Will teach place values later this year.
TQ1-25A1B	ATBMTA1B	Place values are not taught this year.
TQ1-25A1C	ATBMTA1C	Place values were taught in a previous year.
TQ1-25A2	ATBMTA2	How many periods have you spent teaching whole number meanings this year?
TQ1-25A2A	ATBMTA2A	Will teach whole number meanings later this year.
TQ1-25A2B	ATBMTA2B	Whole number meanings are not taught this year.
TQ1-25A2C	ATBMTA2C	Whole number meanings were taught in a previous year.
TQ1-25B	ATBMTB	How many periods have you spent teaching fractions this year?
TQ1-25BA	ATBMTBA	Will teach fractions later this year.
TQ1-25BB	ATBMTBB	Fractions are not taught this year.
TQ1-25BC	ATBMTBC	Fractions were taught in a previous year.
TQ1-25B1	ATBMTB1	How many periods have you spent teaching decimal fractions/meaning this year?
TQ1-25B1A	ATBMTB1A	Will teach decimal fractions/meaning later this year.
TQ1-25B1B	ATBMTB1B	Decimal fractions/meaning are not taught this year.
TQ1-25B1C	ATBMTB1C	Decimal fractions/meaning were taught in a previous year.
TQ1-25B2	ATBMTB2	How many periods have you spent teaching decimal fractions/operations this year?
TQ1-25B2A	ATBMTB2A	Will teach decimal fractions/operations later this year.
TQ1-25B2B	ATBMTB2B	Decimal fractions/operations are not taught this year.
TQ1-25B2C	ATBMTB2C	Decimal fractions/operation were taught in a previous year.
TQ1-25B3	ATBMTB3	How many periods have you spent teaching decimal fractions/properties this year?
TQ1-25B3A	ATBMTB3A	Will teach decimal fractions/properties later this year.
TQ1-25B3B	ATBMTB3B	Decimal fractions/properties are not taught this year.
TQ1-25B3C	ATBMTB3C	Decimal fractions/properties were taught in a previous year.
TQ1-25B4	ATBMTB4	How many periods have you spent teaching common fractions/meaning this year?
TQ1-25B4A	ATBMTB4A	Will teach common fractions/meaning later this year.
TQ1-25B4B	ATBMTB4B	Common fractions/meaning are not taught this year.
TQ1-25B4C	ATBMTB4C	Common fractions/meaning were taught in a previous year.
TQ1-25B5	ATBMTB5	How many periods have you spent teaching common fractions/operations this year?
TQ1-25B5A	ATBMTB5A	Will teach common fractions/operations later this year.
TQ1-25B5B	ATBMTB5B	Common fractions/operations are not taught this year.
TQ1-25B5C	ATBMTB5C	Common fractions/operations were taught in a previous year.
TQ1-25B6	ATBMTB6	How many periods have you spent teaching common fractions/properties this year?
TQ1-25B6A	ATBMTB6A	Will teach common fractions/properties later this year.
TQ1-25B6B	ATBMTB6B	Common fractions/properties are not taught this year.
TQ1-25B6C	ATBMTB6C	Common fractions/properties were taught in a previous year.
TQ1-25B7	ATBMTB7	How many periods have you spent teaching relat. bet. common & dec. fractions this year?
TQ1-25B7A	ATBMTB7A	Will teach relat. bet. common & dec. fractions later this year.
TQ1-25B7B	ATBMTB7B	Relationship bet. common & dec. fractions are not taught this year.
TQ1-25B7C	ATBMTB7C	Relationship bet. common & dec. fractions were taught in a previous year.
TQ1-25B8	ATBMTB8	How many periods have you spent teaching fractions/equivalence this year?
TQ1-25B8A	ATBMTB8A	Will teach fractions/equivalence later this year.
TQ1-25B8B	ATBMTB8B	Fractions/equivalence are not taught this year.

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 4)**

Questionnaire Location	Variable Name	Description
TQ1-25B8C	ATBMTB8C	Fractions/equivalence were taught in a previous year.
TQ1-25B9	ATBMTB9	How many periods have you spent teaching ordering of fractions this year?
TQ1-25B9A	ATBMTB9A	Will teach ordering of fractions later this year.
TQ1-25B9B	ATBMTB9B	Ordering of fractions was not taught this year.
TQ1-25B9C	ATBMTB9C	Ordering of fractions was taught in a previous year.
TQ1-25C	ATBMTC	How many periods have you spent teaching percentages this year?
TQ1-25CA	ATBMTCa	Will teach percentages later this year.
TQ1-25CB	ATBMTCB	Percentages are not taught this year.
TQ1-25CC	ATBMTCc	Percentages were taught in a previous year.
TQ1-25D	ATBMTCd	How many periods have you spent teaching number sets this year?
TQ1-25DA	ATBMTCdA	Will teach number sets later this year.
TQ1-25DB	ATBMTCdB	Number sets are not taught this year.
TQ1-25DC	ATBMTCdC	Number sets were taught in a previous year.
TQ1-25E	ATBMTE	How many periods have you spent teaching number theory this year?
TQ1-25EA	ATBMTEA	Will teach number theory later this year.
TQ1-25EB	ATBMTEB	Number theory is not taught this year.
TQ1-25EC	ATBMTEC	Number theory was taught in a previous year.
TQ1-25F	ATBMTEF	How many periods have you spent teaching number sense this year?
TQ1-25FA	ATBMTEFA	Will teach number sense later this year.
TQ1-25FB	ATBMTEFB	Number sense are not taught this year.
TQ1-25FC	ATBMTEFC	Number sense were taught in a previous year.
TQ1-25G	ATBMTEG	How many periods have you spent teaching measurement units this year?
TQ1-25GA	ATBMTEGA	Will teach measurement units later this year.
TQ1-25GB	ATBMTEGB	Measurement units are not taught this year.
TQ1-25GC	ATBMTEGC	Measurement units were taught in a previous year.
TQ1-25H	ATBMTEH	How many periods have you spent teaching estimation of measurements this year?
TQ1-25HA	ATBMTEHA	Will teach estimation of measurements later this year.
TQ1-25HB	ATBMTEHB	Estimation of measurements are not taught this year.
TQ1-25HC	ATBMTEHC	Estimation of measurements were taught in a previous year.
TQ1-25I	ATBMTEI	How many periods have you spent teaching perimeter, area, & volume this year?
TQ1-25IA	ATBMTEIA	Will teach perimeter, area, & volume later this year.
TQ1-25IB	ATBMTEIB	Perimeter, area, & volume are not taught this year.
TQ1-25IC	ATBMTEIC	Perimeter, area, & volume were taught in a previous year.
TQ1-25J	ATBMTEJ	How many periods have you spent teaching geometry basics this year?
TQ1-25JA	ATBMTEJA	Will teach geometry basics later this year.
TQ1-25JB	ATBMTEJB	Geometry basics are not taught this year.
TQ1-25JC	ATBMTEJC	Geometry basics were taught in a previous year.
TQ1-25K	ATBMTEK	How many periods have you spent teaching congruence and similarity this year?
TQ1-25KA	ATBMTEKA	Will teach congruence and similarity later this year.
TQ1-25KB	ATBMTEKB	Congruence and similarity are not taught this year.
TQ1-25KC	ATBMTEKC	Congruence and similarity were taught in a previous year.
TQ1-25L	ATBMTEL	How many periods have you spent teaching transformations & symmetry this year?
TQ1-25LA	ATBMTELA	Will teach transformations & symmetry later this year.
TQ1-25LB	ATBMTELB	Transformations & symmetry are not taught this year.
TQ1-25LC	ATBMTELC	Transformations & symmetry were taught in a previous year.
TQ1-25M	ATBMTEM	How many periods have you spent teaching 3D geometry this year?

Table S1.2**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 5)**

Questionnaire Location	Variable Name	Description
TQ1-25MA	ATBMTMA	Will teach 3D geometry later this year.
TQ1-25MB	ATBMTMB	3D geometry is not taught this year.
TQ1-25MC	ATBMTMC	3D geometry was taught in a previous year.
TQ1-25N	ATBMTN	How many periods have you spent teaching ratio and proportions this year?
TQ1-25NA	ATBMTNA	Will teach ratio and proportions later this year.
TQ1-25NB	ATBMTNB	Ratio and proportions are not taught this year.
TQ1-25NC	ATBMTNC	Ratio and proportions were taught in a previous year.
TQ1-25N1	ATBMTN1	How many periods have you spent teaching ratio concepts this year?
TQ1-25N1A	ATBMTN1A	Will teach ratio concepts later this year.
TQ1-25N1B	ATBMTN1B	Ratio concepts are not taught this year.
TQ1-25N1C	ATBMTN1C	Ratio concepts were taught in a previous year.
TQ1-25N2	ATBMTN2	How many periods have you spent teaching ratio applications this year?
TQ1-25N2A	ATBMTN2A	Will teach ratio applications later this year.
TQ1-25N2B	ATBMTN2B	Ratio applications are not taught this year.
TQ1-25N2C	ATBMTN2C	Ratio applications were taught in a previous year.
TQ1-25O	ATBMTO	How many periods have you spent teaching functions,relations,& patterns this year?
TQ1-25OA	ATBMTOA	Will teach functions,relations,& patterns later this year.
TQ1-25OB	ATBMTOB	Functions,relations,& patterns are not taught this year.
TQ1-25OC	ATBMTOC	Functions,relations,& patterns were taught in a previous year.
TQ1-25P	ATBMTP	How many periods have you spent teaching equations & formulas this year?
TQ1-25PA	ATBMTPA	Will teach equations & formulas later this year.
TQ1-25PB	ATBMTPB	Equations & formulas are not taught this year.
TQ1-25PC	ATBMTPC	Equations & formulas were taught in a previous year.
TQ1-25P1	ATBMTP1	How many periods have you spent teaching linear equations this year?
TQ1-25P1A	ATBMTP1A	Will teach linear equations later this year.
TQ1-25P1B	ATBMTP1B	Linear equations are not taught this year.
TQ1-25P1C	ATBMTP1C	Linear equations were taught in a previous year.
TQ1-25P2	ATBMTP2	How many periods have you spent teaching other equations this year?
TQ1-25P2A	ATBMTP2A	Will teach other equations later this year.
TQ1-25P2B	ATBMTP2B	Other equations are not taught this year.
TQ1-25P2C	ATBMTP2C	Other equations were taught in a previous year.
TQ1-25Q	ATBMTQ	How many periods have you spent teaching statistics this year?
TQ1-25QA	ATBMTQA	Will teach statistics later this year.
TQ1-25QB	ATBMTQB	Statistics are not taught this year.
TQ1-25QC	ATBMTQC	Statistics were taught in a previous year.
TQ1-25R	ATBMTR	How many periods have you spent teaching probability this year?
TQ1-25RA	ATBMTRA	Will teach probability later this year.
TQ1-25RB	ATBMTRB	Probability is not taught this year.
TQ1-25RC	ATBMTRC	Probability was taught in a previous year.
TQ1-25S	ATBMST	How many periods have you spent teaching sets and logic this year?
TQ1-25SA	ATBMSTA	Will teach sets and logic later this year.
TQ1-25SB	ATBMSTB	Sets and logic are not taught this year.
TQ1-25SC	ATBMSTC	Sets and logic were taught in a previous year.
TQ1-25T	ATBMSTT	How many periods have you spent teaching problem solving this year?
TQ1-25TA	ATBMSTA	Will teach problem solving later this year.
TQ1-25TB	ATBMSTB	Problem solving is not taught this year.

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 6)**

Questionnaire Location	Variable Name	Description
TQ1-25TC	ATBMTTC	Problem solving was taught in a previous year.
TQ1-25U	ATBMTU	How many periods have you spent teaching other mathematicscontent this year?
TQ1-25UA	ATBMTUA	Will teach other mathematicscontent later this year.
TQ1-25UB	ATBMTUB	Other mathematicscontent is not taught this year.
TQ1-25UC	ATBMTUC	Other mathematicscontent was taught in a previous year.
TQ1-26A	ATBMCLTM	How many minutes was the last mathematics lesson you taught to your class?
TQ1-26B01	ATBMT001	Was whole numbers the subject of the lesson?
TQ1-26B02	ATBMT002	Was common fractions the subject of the lesson?
TQ1-26B03	ATBMT003	Was decimal fractions the subject of the lesson?
TQ1-26B04	ATBMT004	Were percentages the subject of the lesson?
TQ1-26B05	ATBMT005	Were other number sets and concepts the subject of the lesson?
TQ1-26B06	ATBMT006	Was number theory the subject of the lesson?
TQ1-26B07	ATBMT007	Was estimation and number sense the subject of the lesson?
TQ1-26B08	ATBMT008	Was measurement units and processes the subject of the lesson?
TQ1-26B09	ATBMT009	Was perimeter, area, and volume the subject of the lesson?
TQ1-26B10	ATBMT010	Were basics of one and two dimensional geometry the subject of the lesson?
TQ1-26B11	ATBMT011	Was geometric congruence and similarity the subject of the lesson?
TQ1-26B12	ATBMT012	Was geometric transformation and symmetry the subject of the lesson?
TQ1-26B13	ATBMT013	Was three dimensional geometry and constructions the subject of the lesson?
TQ1-26B14	ATBMT014	Was ratio and proportion the subject of the lesson?
TQ1-26B15	ATBMT015	Were functions, relations, and patterns the subject of the lesson?
TQ1-26B16	ATBMT016	Were equations, inequalities, and algebraic formulas the subject of the lesson?
TQ1-26B17	ATBMT017	Was probability and statistics the subject of the lesson?
TQ1-26B18	ATBMT018	Were sets and logic the subject of the lesson?
TQ1-26B19	ATBMT019	Were problem solving strategies the subject of the lesson?
TQ1-26B20	ATBMT020	Was other mathematics content the subject of the lesson?
TQ1-26C1	ATBMTOP1	Was this lesson the introduction of a new topic?
TQ1-26C2	ATBMTOP2	Was this lesson the continuation of a previous lesson?
TQ1-26C3	ATBMTOP3	Was this lesson the end of coverage of this topic?
TQ1-26D	ATBMHWW1	Did you assign homework after the class <period>?
TQ1-26E	ATBMHWT1	How long would it take a typical student to complete this homework assignment?
TQ1-27AA1	ATBMOR01	In what order did you do a review of previous lessons?
TQ1-27AA2	ATBMTM01	How long did you spend on reviewing previous lessons?
TQ1-27AB1	ATBMOR02	In what order did you give a short quiz to review previous lesson?
TQ1-27AB2	ATBMTM02	How long did you spend on a quiz reviewing previous lessons?
TQ1-27AC1	ATBMOR03	In what order did you do an oral drill?
TQ1-27AC2	ATBMTM03	How long did you spend on an oral drill?
TQ1-27AD1	ATBMOR04	In what order did you do a review of previous homework?
TQ1-27AD2	ATBMTM04	How long did you spend on reviewing previous homework?
TQ1-27AE1	ATBMOR05	In what order did you do an introduction of a new topic?
TQ1-27AE2	ATBMTM05	How long did you spend on a new topic introduction?
TQ1-27AF1	ATBMOR06	In what order did you do a development of a topic?
TQ1-27AF2	ATBMTM06	How long did you spend on developing a contuing topic?
TQ1-27AG1	ATBMOR07	In what order did you do small group activities?
TQ1-27AG2	ATBMTM07	How long did you spend on small group activities?
TQ1-27AH1	ATBMOR08	In what order did you have students do paper-and-pencil exercises?

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 7)**

Questionnaire Location	Variable Name	Description
TQ1-27AH2	ATBMTM08	How long did students spend on pencil-and-paper exercises?
TQ1-27AI1	ATBMOR09	In what order did you assign homework?
TQ1-27AI2	ATBMTM09	How long did you spend assigning homework?
TQ1-27AJ1	ATBMOR10	In what order did you allow students to work on homework in class?
TQ1-27AJ2	ATBMTM10	How long did students spend on homework in class?
TQ1-27AK1	ATBMOR11	In what order did you have a student laboratory activity?
TQ1-27AK2	ATBMTM11	How long did students spend on a laboratory activity?
TQ1-27B	ATBMSGRP	Did the students work in small groups?
TQ1-28A	ATBMASK1	In your mathematics lessons, how often do you ask students to explain reasoning behind an idea?
TQ1-28B	ATBMASK2	In your mathematics lessons, how often do you ask students to use tables, charts, or graphs?
TQ1-28C	ATBMASK3	How often do you ask students to work on problems with no obvious method of solution?
TQ1-28D	ATBMASK4	How often do you ask students to use computers?
TQ1-28E	ATBMASK5	How often do you ask students to write equations to represent relationships?
TQ1-28F	ATBMASK6	How often do you ask students to practice computational skills?
TQ1-29A	ATBMDO1	After a wrong answer, how often do you correct the student in front of the class?
TQ1-29B	ATBMDO2	After a wrong answer, how often do you ask another student to help?
TQ1-29C	ATBMDO3	After a wrong answer, how often do you call on a student likely to be correct?
TQ1-29D	ATBMDO4	After a wrong answer, how often do you get other responses and discuss?
TQ1-30A	ATBMLES1	In mathematics lessons, how often do students work individually without assistance?
TQ1-30B	ATBMLES2	In mathematics lessons, how often do students work individually with assistance?
TQ1-30C	ATBMLES3	In mathematics lessons, how often do students work as a class with teacher leading?
TQ1-30D	ATBMLES4	In mathematics lessons, how often do students work as a class with students responding to each other?
TQ1-30E	ATBMLES5	In mathematics lessons, how often do students work in pairs without assistance?
TQ1-30F	ATBMLES6	In mathematics lessons, how often do students work in pairs with assistance?
TQ1-31	ATBMHWM2	How often do you assign mathematics homework?
TQ1-32	ATBMHWT2	How many minutes of homework do you usually assign?
TQ1-33A	ATBMWKBK	How often do you assign worksheets for homework?
TQ1-33B	ATBMPROB	How often do you assign textbook problems for homework?
TQ1-33C	ATBMREAD	How often do you assign reading for homework?
TQ1-33D	ATBMWRIT	How often do you assign writing for homework?
TQ1-33E	ATBMDATA	How often do you assign small investigations for homework?
TQ1-33F	ATBMIEXP	How often do you assign long term individual projects for homework?
TQ1-33G	ATBMGEXP	How often do you assign long term small group projects for homework?
TQ1-33H	ATBMFIND	How often do you have students find uses of the content for homework?
TQ1-33I	ATBMORAL	How often do you have students prepare oral reports for homework?
TQ1-33J	ATBMJOUR	How often do you assign journals for homework?
TQ1-34A	ATBMWHW1	How often do you record whether or not homework was completed?
TQ1-34B	ATBMWHW2	How often do you collect, correct and keep homework assignments?
TQ1-34C	ATBMWHW3	How often do you collect, correct and return homework assignments?
TQ1-34D	ATBMWHW4	How often do you give feedback on homework to whole class?
TQ1-34E	ATBMWHW5	How often do you have students correct their own homework assignments in class?
TQ1-34F	ATBMWHW6	How often do you have students exchange homework assignments and correct them?
TQ1-34G	ATBMWHW7	How often do you use homework as a basis for class discussion?
TQ1-34H	ATBMWHW8	How often do you use homework to contribute towards students' grades?
TQ1-35	ATBSSSUB	Is science taught as a separate subject?
TQ1-35A	ATBSYTMW	If science is a separate subject, how many minutes per week is science taught to your class?

Table S1.2
**Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 8)**

Questionnaire Location	Variable Name	Description
TQ1-35B	ATBSNTMW	If science is not a separate subject, how many minutes per week are spent on science?
TQ1-36A	ATBSLES1	In science lessons, how often do students work individually without assistance?
TQ1-36B	ATBSLES2	In science lessons, how often do students work individually with assistance?
TQ1-36C	ATBSLES3	In science lessons, how often do students work as a class with teacher leading?
TQ1-36D	ATBSLES4	In science lessons, how often do students work as a class with students responding to each other?
TQ1-36E	ATBSLES5	In science lessons, how often do students work in pairs without assistance?
TQ1-36F	ATBSLES6	In science lessons, how often do students work in pairs with assistance?
TQ1-37A	ATBSTA	How many periods have you spent teaching earth features this year?
TQ1-37AA	ATBSTAA	Will teach earth features later this year.
TQ1-37AB	ATBSTAB	Earth features are not taught this year.
TQ1-37AC	ATBSTAC	Earth features were taught in a previous year.
TQ1-37A1	ATBSTA1	How many periods have you spent teaching earth features/layers this year?
TQ1-37A1A	ATBSTA1A	Will teach earth features/layers later this year.
TQ1-37A1B	ATBSTA1B	Earth features/layers are not taught this year.
TQ1-37A1C	ATBSTA1C	Earth features/layers were taught in a previous year.
TQ1-37A2	ATBSTA2	How many periods have you spent teaching earth features/landforms this year?
TQ1-37A2A	ATBSTA2A	Will teach earth features/landforms later this year.
TQ1-37A2B	ATBSTA2B	Earth features/landforms are not taught this year.
TQ1-37A2C	ATBSTA2C	Earth features/landforms were taught in a previous year.
TQ1-37A3	ATBSTA3	How many periods have you spent teaching earth features/bodies of water this year?
TQ1-37A3A	ATBSTA3A	Will teach earth features/bodies of water later this year.
TQ1-37A3B	ATBSTA3B	Earth features/bodies of water are not taught this year.
TQ1-37A3C	ATBSTA3C	Earth features/bodies of water were taught in a previous year.
TQ1-37A4	ATBSTA4	How many periods have you spent teaching earth features/atmosphere this year?
TQ1-37A4A	ATBSTA4A	Will teach earth features/atmosphere later this year.
TQ1-37A4B	ATBSTA4B	Earth features/atmosphere is not taught this year.
TQ1-37A4C	ATBSTA4C	Earth features/atmosphere was taught in a previous year.
TQ1-37A5	ATBSTA5	How many periods have you spent teaching earth features/rocks,soil this year?
TQ1-37A5A	ATBSTA5A	Will teach earth features/rocks,soil later this year.
TQ1-37A5B	ATBSTA5B	Earth features/rocks,soil are not taught this year.
TQ1-37A5C	ATBSTA5C	Earth features/rocks,soil were taught in a previous year.
TQ1-37A6	ATBSTA6	How many periods have you spent teaching earth features/iceforms this year?
TQ1-37A6A	ATBSTA6A	Will teach earth features/iceforms later this year.
TQ1-37A6B	ATBSTA6B	Earth features/iceforms are not taught this year.
TQ1-37A6C	ATBSTA6C	Earth features/iceforms were taught in a previous year.
TQ1-37B	ATBSTB	How many periods have you spent teaching weather this year?
TQ1-37BA	ATBSTBA	Will teach weather later this year.
TQ1-37BB	ATBSTBB	Weather is not taught this year.
TQ1-37BC	ATBSTBC	Weather was taught in a previous year.
TQ1-37C	ATBSTC	How many periods have you spent teaching earth processes this year?
TQ1-37CA	ATBSTCA	Will teach earth processes later this year.
TQ1-37CB	ATBSTCB	Earth processes are not taught this year.
TQ1-37CC	ATBSTCC	Earth processes were taught in a previous year.
TQ1-37D	ATBSTD	How many periods have you spent teaching historic earth processes this year?
TQ1-37DA	ATBSTDA	Will teach historic earth processes later this year.
TQ1-37DB	ATBSTDB	Historic earth processes are not taught this year.

Table S1.2
Index of International Background Variables for the Population 1 Teacher Questionnaire Items (Continued 9)

Questionnaire Location	Variable Name	Description
TQ1-37DC	ATBSTDC	Historic earth processes were taught in a previous year.
TQ1-37E	ATBSTE	How many periods have you spent teaching about earth in the universe this year?
TQ1-37EA	ATBSTE A	Will teach earth in the universe later this year.
TQ1-37EB	ATBSTEB	Earth in the universe is not taught this year.
TQ1-37EC	ATBSTEC	Earth in the universe was taught in a previous year.
TQ1-37F	ATBSTF	How many periods have you spent teaching diversity of living things this year?
TQ1-37FA	ATBSTFA	Will teach diversity of living things later this year.
TQ1-37FB	ATBSTFB	Diversity of living things is not taught this year.
TQ1-37FC	ATBSTFC	Diversity of living things was taught in a previous year.
TQ1-37G	ATBSTG	How many periods have you spent teaching human health this year?
TQ1-37GA	ATBSTGA	Will teach human health later this year.
TQ1-37GB	ATBSTGB	Human health is not taught this year.
TQ1-37GC	ATBSTGC	Human health was taught in a previous year.
TQ1-37H	ATBSTH	How many periods have you spent teaching human biology this year?
TQ1-37HA	ATBSTHA	Will teach human biology later this year.
TQ1-37HB	ATBSTHB	Human biology is not taught this year.
TQ1-37HC	ATBSTHC	Human biology was taught in a previous year.
TQ1-37H1	ATBSTH1	How many periods have you spent teaching human biology/structures this year?
TQ1-37H1A	ATBSTH1A	Will teach human biology/structures later this year.
TQ1-37H1B	ATBSTH1B	Human biology/structures is not taught this year.
TQ1-37H1C	ATBSTH1C	Human biology/structures was taught in a previous year.
TQ1-37H2	ATBSTH2	How many periods have you spent teaching human biology/processes this year?
TQ1-37H2A	ATBSTH2A	Will teach human biology/processes later this year.
TQ1-37H2B	ATBSTH2B	Human biology/processes is not taught this year.
TQ1-37H2C	ATBSTH2C	Human biology/processes was taught in a previous year.
TQ1-37H3	ATBSTH3	How many periods have you spent teaching human biology/reproduction this year?
TQ1-37H3A	ATBSTH3A	Will teach human biology/reproduction later this year.
TQ1-37H3B	ATBSTH3B	Human biology/reproduction is not taught this year.
TQ1-37H3C	ATBSTH3C	Human biology/reproduction was taught in a previous year.
TQ1-37H4	ATBSTH4	How many periods have you spent teaching human biology/inheritance this year?
TQ1-37H4A	ATBSTH4A	Will teach human biology/inheritance later this year.
TQ1-37H4B	ATBSTH4B	Human biology/inheritance is not taught this year.
TQ1-37H4C	ATBSTH4C	Human biology/inheritance was taught in a previous year.
TQ1-37I	ATBSTI	How many periods have you spent teaching structure of living things this year?
TQ1-37IA	ATBSTIA	Will teach structure of living things later this year.
TQ1-37IB	ATBSTIB	Structure of living things is not taught this year.
TQ1-37IC	ATBSTIC	Structure of living things was taught in a previous year.
TQ1-37J	ATBSTJ	How many periods have you spent teaching life processes this year?
TQ1-37JA	ATBSTJA	Will teach life processes later this year.
TQ1-37JB	ATBSTJB	Life processes are not taught this year.
TQ1-37JC	ATBSTJC	Life processes were taught in a previous year.
TQ1-37K	ATBSTK	How many periods have you spent teaching life cycles and genetics this year?
TQ1-37KA	ATBSTKA	Will teach life cycles and genetics later this year.
TQ1-37KB	ATBSTKB	Life cycles and genetics are not taught this year.
TQ1-37KC	ATBSTKC	Life cycles and genetics were taught in a previous year.
TQ1-37L	ATBSTL	How many periods have you spent teaching interactions of living things this year?

Table S1.2
Index of International Background Variables for the Population 1 Teacher
Questionnaire Items (Continued 10)

Questionnaire Location	Variable Name	Description
TQ1-37LA	ATBSTLA	Will teach interactions of living things later this year.
TQ1-37LB	ATBSTLB	Interactions of living things are not taught this year.
TQ1-37LC	ATBSTLC	Interactions of living things were taught in a previous year.
TQ1-37M	ATBSTM	How many periods have you spent teaching environmental & resource issues this year?
TQ1-37MA	ATBSTMA	Will teach environmental & resource issues later this year.
TQ1-37MB	ATBSTMB	Environmental & resource issues are not taught this year.
TQ1-37MC	ATBSTMC	Environmental & resource issues were taught in a previous year.
TQ1-37N	ATBSTN	How many periods have you spent teaching animal behavior this year?
TQ1-37NA	ATBSTNA	Will teach animal behavior later this year.
TQ1-37NB	ATBSTNB	Animal behaviors are not taught this year.
TQ1-37NC	ATBSTNC	Animal behaviors were taught in a previous year.
TQ1-37O	ATBSTO	How many periods have you spent teaching about matter this year?
TQ1-37OA	ATBSTOA	Will teach matter later this year.
TQ1-37OB	ATBSTOB	Matter is not taught this year.
TQ1-37OC	ATBSTOC	Matter was taught in a previous year.
TQ1-37P	ATBSTP	How many periods have you spent teaching energy types this year?
TQ1-37PA	ATBSTPA	Will teach energy types later this year.
TQ1-37PB	ATBSTPB	Energy types are not taught this year.
TQ1-37PC	ATBSTPC	Energy types were taught in a previous year.
TQ1-37Q	ATBSTQ	How many periods have you spent teaching energy processes this year?
TQ1-37QA	ATBSTQA	Will teach energy processes later this year.
TQ1-37QB	ATBSTQB	Energy processes are not taught this year.
TQ1-37QC	ATBSTQC	Energy processes were taught in a previous year.
TQ1-37Q1	ATBSTQ1	How many periods have you spent teaching energy processes/light this year?
TQ1-37Q1A	ATBSTQ1A	Will teach energy processes/light later this year.
TQ1-37Q1B	ATBSTQ1B	Energy processes/light are not taught this year.
TQ1-37Q1C	ATBSTQ1C	Energy processes/light were taught in a previous year.
TQ1-37R	ATBSTR	How many periods have you spent teaching physical & chemical changes this year?
TQ1-37RA	ATBSTRA	Will teach physical & chemical changes later this year.
TQ1-37RB	ATBSTRB	Physical & chemical changes are not taught this year.
TQ1-37RC	ATBSTRC	Physical & chemical changes were taught in a previous year.
TQ1-37S	ATBSTS	How many periods have you spent teaching forces and motion this year?
TQ1-37SA	ATBSTSA	Will teach forces and motion later this year.
TQ1-37SB	ATBSTSB	Forces and motion are not taught this year.
TQ1-37SC	ATBSTSC	Forces and motion were taught in a previous year.
TQ1-37T	ATBSTT	How many periods have you spent teaching about science and society this year?
TQ1-37TA	ATBSTTA	Will teach science and society later this year.
TQ1-37TB	ATBSTTB	Science and society is not taught this year.
TQ1-37TC	ATBSTTC	Science and society was taught in a previous year.
TQ1-37U	ATBSTU	How many periods have you spent teaching history of science this year?
TQ1-37UA	ATBSTUA	Will teach history of science later this year.
TQ1-37UB	ATBSTUB	History of science is not taught this year.
TQ1-37UC	ATBSTUC	History of science was taught in a previous year.
TQ1-37V	ATBSTV	How many periods have you spent teaching the nature of science this year?
TQ1-37VA	ATBSTVA	Will teach nature of science later this year.
TQ1-37VB	ATBSTVB	Nature of science is not taught this year.

Table S1.2
Index of International Background Variables for the Population 1 Teacher Questionnaire Items (Continued 11)

Questionnaire Location	Variable Name	Description
TQ1-37VC	ATBSTVC	Nature of science was taught in a previous year.
TQ1-37W1	ATBSTW1	How many periods have you spent teaching measurement/tools this year?
TQ1-37W1A	ATBSTW1A	Will teach measurement/tools later this year.
TQ1-37W1B	ATBSTW1B	Measurement/tools is not taught this year.
TQ1-37W1C	ATBSTW1C	Measurement/tools was taught in a previous year.
TQ1-37W2	ATBSTW2	How many periods have you spent teaching measurement/procedures this year?
TQ1-37W2A	ATBSTW2A	Will teach measurement/procedures later this year.
TQ1-37W2B	ATBSTW2B	Measurement/procedures is not taught this year.
TQ1-37W2C	ATBSTW2C	Measurement/procedures was taught in a previous year.
TQ1-37W3	ATBSTW3	How many periods have you spent teaching measurement/making this year?
TQ1-37W3A	ATBSTW3A	Will teach measurement/making later this year.
TQ1-37W3B	ATBSTW3B	Measurement/making is not taught this year.
TQ1-37W3C	ATBSTW3C	Measurement/making was taught in a previous year.
TQ1-37X1	ATBSTX1	How many periods have you spent teaching data analysis/representing this year?
TQ1-37X1A	ATBSTX1A	Will teach data analysis/representing later this year.
TQ1-37X1B	ATBSTX1B	Data analysis/representing is not taught this year.
TQ1-37X1C	ATBSTX1C	Data analysis/representing was taught in a previous year.
TQ1-37X2	ATBSTX2	How many periods have you spent teaching data analysis/interpreting this year?
TQ1-37X2A	ATBSTX2A	Will teach data analysis/interpreting later this year.
TQ1-37X2B	ATBSTX2B	Data analysis/interpreting is not taught this year.
TQ1-37X2C	ATBSTX2C	Data analysis/interpreting was taught in a previous year.
TQ1-37X3	ATBSTX3	How many periods have you spent teaching data analysis/collecting & interpreting this year?
TQ1-37X3A	ATBSTX3A	Will teach data analysis/collecting & interpreting later this year.
TQ1-37X3B	ATBSTX3B	Data analysis/collecting & interpreting is not taught this year.
TQ1-37X3C	ATBSTX3C	Data analysis/collecting & interpreting was taught in a previous year.
TQ1-37X4	ATBSTX4	How many periods have you spent teaching data analysis/concluding this year?
TQ1-37X4A	ATBSTX4A	Will teach data analysis/concluding later this year.
TQ1-37X4B	ATBSTX4B	Data analysis/concluding is not taught this year.
TQ1-37X4C	ATBSTX4C	Data analysis/concluding was taught in a previous year.
TQ1-38	ATBGCARE	Was teaching your first choice as a career when beginning university?
TQ1-39	ATBGCHNG	Would you change to another career if you had the opportunity?
TQ1-40	ATBGSOAP	Do you think that society appreciates your work?
TQ1-41	ATBGSTAP	Do you think your students appreciate your work?
TQ1-42	ATBGBOOK	Approximately how many books are in your home?
TQ1-43A	ATBGRNK1	Social status rank of accountant
TQ1-43B	ATBGRNK2	Social status rank of <medical doctor>
TQ1-43C	ATBGRNK3	Social status rank of lawyer
TQ1-43D	ATBGRNK4	Social status rank of engineer
TQ1-43E	ATBGRNK5	Social status rank of nurse
TQ1-43F	ATBGRNK6	Social status rank of senior <civil servant>
TQ1-43G	ATBGRNK7	Social status rank of teacher, primary school
TQ1-43H	ATBGRNK8	Social status rank of teacher, secondary school
TQ1-43I	ATBGRNK9	Social status rank of <unskilled worker>

Table S1.3
**Index of International Background Variables for the Population 1 School
Questionnaire Items**

Questionnaire Location	Variable Name	Description
SCQ1-1	ACBGCOMM	In what type of community is your school located?
SCQ1-2A	ACBGGRPK	Does your school serve pre-kindergarten?
SCQ1-2B	ACBGGRK	Does your school serve kindergarten?
SCQ1-2C	ACBGGR1	Does your school serve 1st grade?
SCQ1-2D	ACBGGR2	Does your school serve 2nd grade?
SCQ1-2E	ACBGGR3	Does your school serve 3rd grade?
SCQ1-2F	ACBGGR4	Does your school serve 4th grade?
SCQ1-2G	ACBGGR5	Does your school serve 5th grade?
SCQ1-2H	ACBGGR6	Does your school serve 6th grade?
SCQ1-2I	ACBGGR7	Does your school serve 7th grade?
SCQ1-2J	ACBGGR8	Does your school serve 8th grade?
SCQ1-2K	ACBGGR9	Does your school serve 9th grade?
SCQ1-2L	ACBGGR10	Does your school serve 10th grade?
SCQ1-2M	ACBGGR11	Does your school serve 11th grade?
SCQ1-2N	ACBGGR12	Does your school serve 12th grade?
SCQ1-2O	ACBGGR13	Does your school serve 13th grade?
SCQ1-3A	ACBGFTE1	How many principals are on the staff of your school? (in FTE)
SCQ1-3B	ACBGFTE2	How many assistant principals are on the staff of your school? (in FTE)
SCQ1-3C	ACBGFTE3	How many classroom teachers are on the staff of your school? (in FTE)
SCQ1-3D	ACBGFTE4	How many teacher aides are on the staff of your school? (in FTE)
SCQ1-3E	ACBGFTE5	How many other professional staff members are on the staff of your school? (in FTE)
SCQ1-4A	ACBGFTTE	How many individual full-time classroom teachers are there in your school?
SCQ1-4B	ACBGPTTE	How many individual part-time classroom teachers are there in your school?
SCQ1-5	ACBGTE5Y	What percentage of the classroom teachers have been at your school for 5 or more years?
SCQ1-6A	ACBMTEAC	What percentage of the classroom teachers teach 3/4 + of teaching load in mathematics?
SCQ1-6B	ACBMNONE	What percentage of the classroom teachers teach no mathematics?
SCQ1-6C	ACBSTEAC	What percentage of the classroom teachers teach 3/4 + of teaching load in science?
SCQ1-6D	ACBSNONE	What percentage of the classroom teachers teach no science?
SCQ1-6E	ACBGTEAC	What percentage of the classroom teachers teach 3/4 + of load in mathematics and science?
SCQ1-6F	ACBGNONE	What percentage of the classroom teachers teach no mathematics or science?
SCQ1-7	ACBGSAME	How long do students typically stay with the same teacher?
SCQ1-8A	ACBMRELW	How many hours during the school week do teachers have for tasks related to teaching mathematics?
SCQ1-8B	ACBMTEAW	How many hours during the school week do teachers have for teaching mathematics?
SCQ1-8C	ACBSRELW	How many hours during the school week do teachers have for tasks related to teaching science?
SCQ1-8D	ACBSTEAW	How many hours during the school week do teachers have for teaching science?
SCQ1-9A	ACBGCOL1	Does your school have policy promoting cooperation & collaboration among teachers?
SCQ1-9B	ACBGCOL2	Are teachers encouraged to share and discuss instructional ideas and materials?
SCQ1-9C	ACBGCOL3	Do teachers in your school meet regularly to discuss instructional goals & issues?
SCQ1-10A	ACBGAC01	As principal, how many hours per month do you spend on hiring teachers?
SCQ1-10B	ACBGAC02	As principal, how many hours per month do you spend on representing school in community?
SCQ1-10C	ACBGAC03	As principal, how many hours per month do you spend on representing school at official meetings?
SCQ1-10D	ACBGAC04	As principal, how many hours per month do you spend on internal administrative tasks?
SCQ1-10E	ACBGAC05	As principal, how many hours per month do you spend on teaching?
SCQ1-10F	ACBGAC06	As principal, how many hours per month do you spend on giving demonstration lessons?
SCQ1-10G	ACBGAC07	As principal, how many hours per month do you spend discussing educ.?? objectives w/ teachers?
SCQ1-10H	ACBGAC08	As principal, how many hours per month do you spend on initiating curriculum revision/planning?

Table S1.3**Index of International Background Variables for the Population 1 School Questionnaire Items (Continued)**

Questionnaire Location	Variable Name	Description
SCQ1-10I	ACBGAC09	As principal, how many hours per month do you spend on talking with parents?
SCQ1-10J	ACBGAC10	As principal, how many hours per month do you spend on counseling/disciplining students?
SCQ1-10K	ACBGAC11	As principal how many hours per month do you spend responding to requests from district, state, nat'l officials?
SCQ1-10L	ACBGAC12	As principal, how many hours per month do you spend on training teachers?
SCQ1-10M	ACBGAC13	As principal, how many hours per month do you spend on professional development activities?
SCQ1-10N	ACBGAC14	As principal, how many hours per month do you spend on other activities?
SCQ1-11A	ACBGRP01	In your school, who has primary responsibility for hiring teachers?
SCQ1-11B	ACBGRP02	In your school, who has primary responsibility for establishing disciplinary policies?
SCQ1-11C	ACBGRP03	In your school, who has primary responsibility for establishing student grading policies?
SCQ1-11D	ACBGRP04	In your school, who has primary responsibility for formulating the school budget?
SCQ1-11E	ACBGRP05	In your school, who has primary responsibility for purchasing supplies?
SCQ1-11F	ACBGRP06	In your school, who has primary responsibility for placing students in classes?
SCQ1-11G	ACBGRP07	In your school, who has primary responsibility for assigning teachers to classes?
SCQ1-11H	ACBGRP08	In your school, who has primary responsibility for choosing textbooks?
SCQ1-11I	ACBGRP09	In your school, who has primary responsibility for establishing homework policies?
SCQ1-11J	ACBGRP10	In your school, who has primary responsibility for determining teacher salaries?
SCQ1-11K	ACBGRP11	In your school, who has primary responsibility for establishing community relationships?
SCQ1-11L	ACBGRP12	In your school, who has primary responsibility for communicating with students' families?
SCQ1-11M	ACBGRP13	In your school, who has primary responsibility for determining course content?
SCQ1-11N	ACBGRP14	In your school, who has primary responsibility for determining course offerings?
SCQ1-12A	ACBGIF01	How much influence does the <National Curriculum Council> have in determining curriculum?
SCQ1-12B	ACBGIF02	How much influence does the <National Subject Association> have in determining curriculum?
SCQ1-12C	ACBGIF03	How much influence does the <educational district> have in determining curriculum?
SCQ1-12D	ACBGIF04	How much influence does the <school governing board> have in determining curriculum?
SCQ1-12E	ACBGIF05	How much influence does the principal/head of school have in determining curriculum?
SCQ1-12F	ACBGIF06	How much influence do teachers collectively have in determining curriculum?
SCQ1-12G	ACBGIF07	How much influence do teachers of a subject have in determining curriculum?
SCQ1-12H	ACBGIF08	How much influence do individual teachers have in determining curriculum?
SCQ1-12I	ACBGIF09	How much influence do parents have in determining curriculum?
SCQ1-12J	ACBGIF10	How much influence do students have in determining curriculum?
SCQ1-12K	ACBGIF11	How much influence do church/religious groups have in determining curriculum?
SCQ1-12L	ACBGIF12	How much influence does business community have in determining curriculum?
SCQ1-12M	ACBGIF13	How much influence do textbook publishers have in determining curriculum?
SCQ1-12N	ACBGIF14	How much influence do external exams/standardized tests have in determining curriculum?
SCQ1-12O	ACBGIF15	How much influence do teacher unions have in determining curriculum?
SCQ1-13A	ACBMCURR	Does your school have its own written statement of the mathematics content to be taught?
SCQ1-13B	ACBSCURR	Does your school have its own written statement of the science content to be taught?
SCQ1-14A	ACBGCOM1	In your school, how many computers are available for use by teachers or students?
SCQ1-14B	ACBGCOM2	In your school, how many computers are used by teachers for administrative purposes?
SCQ1-14C	ACBGCOM3	In your school, how many computers are used by teachers during instructional time?
SCQ1-14D	ACBGCOM4	In your school, how many computers are used by students for educational purposes?
SCQ1-14E	ACBGCOM5	In your school, how many computers are used by office staff for record keeping?
SCQ1-15A	ACBGST01	Is your school's instructional capacity affected by inadequacy of instructional materials?
SCQ1-15B	ACBGST02	Is your school's instructional capacity affected by inadequacy of budget for supplies?
SCQ1-15C	ACBGST03	Is your school's instructional capacity affected by inadequacy of school buildings and grounds?
SCQ1-15D	ACBGST04	Is your school's instructional capacity affected by inadequacy of heating/cooling and lighting system?

Table S1.3
Index of International Background Variables for the Population 1 School
Questionnaire Items (Continued 2)

Questionnaire Location	Variable Name	Description
SCQ1-15E	ACBGST05	Is your school's instructional capacity affected by inadequacy of instructional space?
SCQ1-15F	ACBGST06	Is your school's instructional capacity affected by inadequacy of equipment for handicapped students?
SCQ1-15G	ACBMST07	Is your school's instructional capacity affected by inadequacy of computers for mathematics instruction?
SCQ1-15H	ACBMST08	Is your school's instructional capacity affected by inadequacy of computer software for mathematics instruction?
SCQ1-15I	ACBMST09	Is your school's instructional capacity affected by inadequacy of calculators for mathematics instruction?
SCQ1-15J	ACBMST10	Is your school's instructional capacity affected by inadequacy of library materials relevant to mathematics instruction?
SCQ1-15K	ACBMST11	Is your school's instructional capacity affected by inadequacy of A-V resources for mathematics instruction?
SCQ1-15L	ACBSST12	Is your school's instructional capacity affected by inadequacy of science laboratory equipment & materials?
SCQ1-15M	ACBSST13	Is your school's instructional capacity affected by inadequacy of computers for science instruction?
SCQ1-15N	ACBSST14	Is your school's instructional capacity affected by inadequacy of computer software for science instruction?
SCQ1-15O	ACBSST15	Is your school's instructional capacity affected by inadequacy of calculators for science instruction?
SCQ1-15P	ACBSST16	Is your school's instructional capacity affected by inadequacy of library materials relevant to science instruction?
SCQ1-15Q	ACBSST17	Is your school's instructional capacity affected by inadequacy of A-V resources for science instruction?
SCQ1-16A1	ACBGBENR	How many boys attend your school?
SCQ1-16A2	ACBGGENR	How many girls attend your school?
SCQ1-16B	ACBGABST	What percentage of students are absent on a typical day?
SCQ1-16C	ACBGENDY	What percentage of students who begin the year in your school also finish in your school?
SCQ1-16D	ACBGTNSF	What percentage of students in your school transfer in after beginning of school year?
SCQ1-16E1	ACBGLBER	How many boys are in lower grade?
SCQ1-16E2	ACBGLGER	How many girls are in lower grade?
SCQ1-16F1	ACBGLBRT	How many boys in lower grade are repeating the grade?
SCQ1-16F2	ACBGLGRT	How many girls in lower grade are repeating the grade?
SCQ1-16G	ACBGLSIZ	What is the approximate average class size in lower grade?
SCQ1-16H	ACBGLMGR	How many lower grade students are in multi-grade classrooms?
SCQ1-16I1	ACBMLBER	How many boys in lower grade study mathematics?
SCQ1-16I2	ACBMLGER	How many girls in lower grade study mathematics?
SCQ1-16J1	ACBSLBER	How many boys in lower grade study science?
SCQ1-16J2	ACBSLGER	How many girls in lower grade study science?
SCQ1-16K1	ACBGUBER	How many boys are in upper grade?
SCQ1-16K2	ACBGUGER	How many girls are in upper grade?
SCQ1-16L1	ACBGUBRT	How many boys in upper grade are repeating the grade?
SCQ1-16L2	ACBGUGRT	How many girls in upper grade are repeating the grade?
SCQ1-16M	ACBGUSIZ	What is the approximate average class size in upper grade?
SCQ1-16N	ACBGUMGR	How many upper grade students are in multi-grade classrooms?
SCQ1-16O1	ACBMUBER	How many boys in upper grade study mathematics?
SCQ1-16O2	ACBMUGER	How many girls in upper grade study mathematics?
SCQ1-16P1	ACBSUBER	How many boys in upper grade study science?
SCQ1-16P2	ACBSUGER	How many girls in upper grade study science?
SCQ1-17A1	ACBGUO01	How often does school administration or staff have to deal with upper grade students arriving late at school?
SCQ1-17A2	ACBGUP01	What percentage of upper grade students arrive late at school?
SCQ1-17B1	ACBGUO02	How often does school administration or staff have to deal with upper grade students' absenteeism without excuse?
SCQ1-17B2	ACBGUP02	What percentage of upper grade students are absent without an excuse?
SCQ1-17C1	ACBGUO03	How often does school administration or staff have to deal with upper grade students skipping class periods?
SCQ1-17C2	ACBGUP03	What percentage of upper grade students skip classes?
SCQ1-17D1	ACBGUO04	How often does school administration or staff have to deal with upper grade students violating the dress code?
SCQ1-17D2	ACBGUP04	What percentage of upper grade students violate the dress code?

Table S1.3
**Index of International Background Variables for the Population 1 School
Questionnaire Items (Continued 3)**

Questionnaire Location	Variable Name	Description
SCQ1-17E1	ACBGUO05	How often does school administration or staff have to deal with classroom disturbance by upper grade students?
SCQ1-17E2	ACBGUP05	What percentage of upper grade students disturb class?
SCQ1-17F1	ACBGUO06	How often does school administration or staff have to deal with cheating by upper grade students?
SCQ1-17F2	ACBGUP06	What percentage of upper grade students cheat?
SCQ1-17G1	ACBGUO07	How often does school administration or staff have to deal with use of profanity by upper grade students?
SCQ1-17G2	ACBGUP07	What percentage of upper grade students use profanity?
SCQ1-17H1	ACBGUO08	How often does school administration or staff have to deal with vandalism by upper grade students?
SCQ1-17H2	ACBGUP08	What percentage of upper grade students have vandalized school property?
SCQ1-17I1	ACBGUO09	How often does school administration or staff have to deal with theft by upper grade students?
SCQ1-17I2	ACBGUP09	What percentage of upper grade students have been involved with theft?
SCQ1-17J1	ACBGUO10	How often does school administration or staff have to deal with intimidation of students by upper grade students?
SCQ1-17J2	ACBGUP10	What percentage of upper grade students have been involved in intimidation of students?
SCQ1-17K1	ACBGUO11	How often does staff have to deal with physical injury to students caused by upper grade students?
SCQ1-17K2	ACBGUP11	What percentage of upper grade students have caused injury to another student?
SCQ1-17L1	ACBGUO12	How often does staff have to deal with intimidation of teachers or staff by upper grade students?
SCQ1-17L2	ACBGUP12	What percentage of upper grade students been involved in intimidation of teachers or staff members?
SCQ1-17M1	ACBGUO13	How often does staff have to deal with physical injury of teachers or staff caused by upper grade students?
SCQ1-17M2	ACBGUP13	What percentage of upper grade students have caused physical injury to a teacher or staff member?
SCQ1-18	ACBGINST	Is instructional time the same for both lower grade and upper grade in your school?
SCQ1-18A1	ACBGLDYY	How many instructional days are in the school year for lower grade?
SCQ1-18A2	ACBGUDYY	How many instructional days are in the school year for upper grade?
SCQ1-18B1	ACBGLFLW	How many full instructional days are in the school week for lower grade?
SCQ1-18B2	ACBGUFLW	How many full instructional days are in the school week for upper grade?
SCQ1-18C1	ACBGLHFW	How many half instructional days are in the school week for lower grade?
SCQ1-18C2	ACBGUHFH	How many half instructional days are in the school week for upper grade?
SCQ1-18D1	ACBGLTHW	How many total hours are in the school week for lower grade?
SCQ1-18D2	ACBGUTHW	How many total hours are in the school week for upper grade?
SCQ1-18E1	ACBGLIHW	How many instructional hours are in the school week for lower grade?
SCQ1-18E2	ACBGUIHW	How many instructional hours are in the school week for upper grade?
SCQ1-19	ACBGDIVI	Is the school week divided into instructional periods?
SCQ1-19A1	ACBGLPDW	How many instructional periods are there in a week for lower grade?
SCQ1-19A2	ACBGUPDW	How many instructional periods are there in a week for upper grade?
SCQ1-19B1	ACBGLTMP	How many minutes is a typical instructional period for lower grade?
SCQ1-19B2	ACBGUTMP	How many minutes is a typical instructional period for upper grade?
SCQ1-20	ACBMRMDL	Does your school provide remedial teaching in mathematics?
SCQ1-20A	ACBMRMD1	For remedial mathematics teaching, are groups formed within regular mathematics classes?
SCQ1-20B	ACBMRMD2	For remedial mathematics teaching, are students withdrawn from regular mathematics classes?
SCQ1-20C	ACBMRMD3	For remedial mathematics teaching, do students receive extra <tuition> before/after school?
SCQ1-20D	ACBMRMD4	For remedial mathematics teaching, is some other method used?
SCQ1-21	ACBSRMDL	Does your school provide remedial teaching in science?
SCQ1-21A	ACBSRMD1	For remedial science teaching, are groups formed within regular science classes?
SCQ1-21B	ACBSRMD2	For remedial science teaching, are students withdrawn from regular science classes?
SCQ1-21C	ACBSRMD3	For remedial science teaching, do students receive extra <tuition> before/after school?
SCQ1-21D	ACBSRMD4	For remedial science teaching, is some other method used?
SCQ1-22	ACBMENRH	Does your school provide special enrichment activities in mathematics?
SCQ1-22A	ACBMENR1	For mathematics enrichment, are groups formed within regular mathematics classes?

Table S1.3
Index of International Background Variables for the Population 1 School
Questionnaire Items (Continued 4)

Questionnaire Location	Variable Name	Description
SCQ1-22B	ACBMENR2	For mathematics enrichment, are students withdrawn from regular mathematics classes?
SCQ1-22C	ACBMENR3	For mathematics enrichment, do students receive extra <tuition> before/after school?
SCQ1-22D	ACBMENR4	For mathematics enrichment, is some other method used?
SCQ1-23	ACBSENRH	Does your school provide special enrichment activities in science?
SCQ1-23A	ACBSENR1	For science enrichment, are groups formed within regular science classes?
SCQ1-23B	ACBSENR2	For science enrichment, are students withdrawn from regular science classes?
SCQ1-23C	ACBSENR3	For science enrichment, do students receive extra <tuition> before/after school?
SCQ1-23D	ACBSENR4	For science enrichment, is some other method used?
SCQ1-24	ACBMUSCO	Do all students in upper grade follow the same course of study in mathematics?
SCQ1-24A	ACBMUC1	How many instructional minutes per week are students in upper grade required to spend in mathematics classes?
SCQ1-24B	ACBMUC2	How many instructional weeks per year are students in upper grade required to spend in mathematics classes?
SCQ1-24C	ACBMUC3	How many different courses of study in mathematics are available to upper grade students?
SCQ1-24D1	ACBMUC41	What percentage of upper grade students take the most advanced mathematics course of study?
SCQ1-24D2	ACBMUC42	What percentage of upper grade students take the least advanced mathematics course of study?
SCQ1-24E1	ACBMUC51	How many instructional minutes/week for students in most advanced mathematics course of study?
SCQ1-24E2	ACBMUC52	How many instructional minutes/week for students in least advanced mathematics course of study?
SCQ1-24F1	ACBMUC61	How many instructional weeks/year for students in most advanced mathematics course of study?
SCQ1-24F2	ACBMUC62	How many instructional weeks/year for students in least advanced mathematics course of study?
SCQ1-25A	ACBMUFC1	How important is academic performance in selecting mathematics course of study for student?
SCQ1-25B	ACBMUFC2	How important are standardized tests in selecting mathematics course of study for student?
SCQ1-25C	ACBMUFC3	How important is entrance exam in selecting mathematics course of study for student?
SCQ1-25D	ACBMUFC4	How important is oral exam in selecting mathematics course of study for student?
SCQ1-25E	ACBMUFC5	How important are teacher recommendations in selecting mathematics course of study for student?
SCQ1-25F	ACBMUFC6	How important are parental wishes in selecting mathematics course of study for student?
SCQ1-25G	ACBMUFC7	How important are student wishes in selecting mathematics course of study for student?
SCQ1-25H	ACBMUFC8	How important are curricular requirements in selecting mathematics course of study for student?
SCQ1-26	ACBSUSCO	Do all students in upper grade follow the same course of study in science?
SCQ1-26A	ACBSUC1	How many instructional minutes per week are students in upper grade required to spend in science classes?
SCQ1-26B	ACBSUC2	How many instructional weeks per year are students in upper grade required to spend in science classes?
SCQ1-26C	ACBSUC3	How many different courses of study in science are available to upper grade students?
SCQ1-26D1	ACBSUC41	What percentage of upper grade students take the most advanced science course of study?
SCQ1-26D2	ACBSUC42	What percentage of upper grade students take the least advanced science course of study?
SCQ1-26E1	ACBSUC51	What is the number of instructional minutes/week for upper grade students in the most advanced science course of study?
SCQ1-26E2	ACBSUC52	What is the number of instructional minutes/week for upper grade students in the least advanced science course of study?
SCQ1-26F1	ACBSUC61	What is the number of instructional weeks/year for upper grade students in the most advanced science course of study?
SCQ1-26F2	ACBSUC62	What is the number of instructional weeks/year for upper grade students in the least advanced science course of study?
SCQ1-27A	ACBSUFC1	How important is academic performance in selecting science course of study for student?
SCQ1-27B	ACBSUFC2	How important are standardized tests in selecting science course of study for student?
SCQ1-27C	ACBSUFC3	How important is entrance exam in selecting science course of study for student?
SCQ1-27D	ACBSUFC4	How important is oral exam in selecting science course of study for student?
SCQ1-27E	ACBSUFC5	How important are teacher recommendations in selecting science course of study for student?
SCQ1-27F	ACBSUFC6	How important are parental wishes in selecting science course of study for student?
SCQ1-27G	ACBSUFC7	How important are student wishes in selecting science course of study for student?

Table S1.3**Index of International Background Variables for the Population 1 School Questionnaire Items (Continued 5)**

Questionnaire Location	Variable Name	Description
SCQ1-27H	ACBSUFC8	How important are curricular requirements in selecting science course of study for student?
SCQ1-28A	ACBGSTD1	What percent of students in your school come from disadvantaged economic backgrounds?
SCQ1-28B	ACBGSTD2	What percent of students in your school have neither parent educated beyond primary?
SCQ1-28C	ACBGSTD3	What percent of students in your school come from one-parent families?
SCQ1-28D	ACBGSTD4	What percent of students in your school attended preschool?
SCQ1-28E	ACBGSTD5	What percent of students in your school have a first language other than that taught in school?
SCQ1-28F	ACBGSTD6	What percent of students in your school have learning problems?
SCQ1-28G	ACBGSTD7	What percent of students in your school have health problems?
SCQ1-28H	ACBGSTD8	What percent of students in your school have nutrition problems?
SCQ1-29A	ACBGBS01	In admitting students to your school, do you consider residence in a particular area?
SCQ1-29B	ACBGBS02	In admitting students to your school, do you consider student's academic performance?
SCQ1-29C	ACBGBS03	In admitting students to your school, do you consider interview with student?
SCQ1-29D	ACBGBS04	In admitting students to your school, do you consider interview with parent?
SCQ1-29E	ACBGBS05	In admitting students to your school, is preference given to students with siblings in the school?
SCQ1-29F	ACBGBS06	In admitting students to your school, is preference given according to date of application?
SCQ1-29G	ACBGBS07	In admitting students to your school, do you consider recommendations of previous teachers?
SCQ1-29H	ACBGBS08	In admitting students to your school, is preference given to students from a particular school?
SCQ1-29I	ACBGBS09	In admitting students to your school, is preference given to children of former students?
SCQ1-29J	ACBGBS10	In admitting students to your school, do you consider performance on a standardized test?
SCQ1-29K	ACBGBS11	In admitting students to your school, do you consider performance on an entrance exam?
SCQ1-29L	ACBGBS12	In admitting students to your school, do you consider performance on an oral exam?
SCQ1-29M	ACBGBS13	In admitting students to your school, do you consider other factors?

Section 1

Student Background Questionnaire (SQ1)



Identification Label

School:

Class:

Student:

IEA Third International Mathematics and Science Study

Student Questionnaire

Population 1

TIMSS Study Center
Boston College
Chestnut Hill, MA 02167
USA

(Institute Address)

Doc. Ref.: ICC877/NRC414
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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

	Yes	No
1. I attend school	(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

	<i>strongly agree</i>	<i>agree</i>	<i>disagree</i>	<i>strongly disagree</i>
1. I like ice cream.	(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.

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.>

2. Are you a girl or a boy?

Circle either A or B.

girl A

boy B

3a. Were you born in <country> ?

Circle either A or B.

Yes A

No B

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

Write in your age at that time.

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

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

Circle one letter, A, B, or C.

always or almost always A

sometimes B

never C

5. Outside of school do you ever...*Circle either A or B for each line.*

	<i>Yes</i>	<i>No</i>
a) have <extra lessons/cramming school> before or after school in math<s>?	A	B
b) have <extra lessons/cramming school> before or after school in science?	A	B
c) participate in science or math<s> clubs?	A	B

6. On a normal school day, how much time before or after school do you spend 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>3-4 hours</i>	<i>more than 4 hours</i>
a) watching television and videos	A	B	C	D	E
b) playing computer games	A	B	C	D	E
c) playing or talking with friends outside of school	A	B	C	D	E
d) doing jobs at home	A	B	C	D	E
e) playing sports	A	B	C	D	E
f) reading a book for enjoyment	A	B	C	D	E
g) studying math<s> or doing math<s> homework after school	A	B	C	D	E
h) studying science or doing science homework after school	A	B	C	D	E
i) studying or doing homework in school subjects other than math<s> and science	A	B	C	D	E

7. 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>
a) mother	A	B
b) father	A	B
c) one or more brothers	A	B
d) one or more sisters	A	B
e) stepmother	A	B
f) stepfather	A	B
g) one or more grandparents	A	B
h) another relative or relatives such as uncles, aunts, cousins, etc.	A	B
i) another person or persons (not relatives)	A	B

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

Write in the total number of people.

_____ (Don't forget to include yourself.)

	<i>Yes</i>	<i>No</i>
9a. Was your mother born in <country>?	A	B
<i>Circle either A or B.</i>		
9b. Was your father born in <country>?	A	B
<i>Circle either A or B.</i>		

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> |
|--|------------|-----------|
| a) calculator | A | B |
| b) computer | A | B |
| c) study desk/table for your use | A | B |
| d) dictionary | A | B |
| e) <country-specific> | A | B |
| f) <country-specific> | A | B |
| g) <country-specific> | A | B |
| h) <country-specific> | A | B |
| i) <country-specific> | A | B |
| j) <country-specific> | A | B |
| k) <country-specific> | A | B |
| l) <country-specific> | A | B |
| m) <country-specific> | A | B |
| n) <country-specific> | A | B |
| o) <country-specific> | A | B |
| p) <country-specific> | A | B |

12. Does your mother think it is important for you to...*Circle either A or B for each line.*

	<i>Yes</i>	<i>No</i>
a) do well in science at school?	A	B
b) do well in math<s> at school?	A	B
c) be good at sports?	A	B
d) have time to have fun?	A	B

13. Do most of your friends think it is important to...*Circle either A or B for each line.*

	<i>Yes</i>	<i>No</i>
a) do well in science at school?	A	B
b) do well in math<s> at school?	A	B
c) be good at sports?	A	B
d) have time to have fun?	A	B

14. Do you think it is important to ...*Circle either A or B for each line.*

	<i>Yes</i>	<i>No</i>
a) do well in science at school?	A	B
b) do well in math<s> at school?	A	B
c) be good at sports?	A	B
d) have time to have fun?	A	B

15. How well do you usually do in math <s> 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>
a) I usually do well in math<s>.....	A	B	C	D
b) I usually do well in science.	A	B	C	D

16. Did any of these things happen last month at school?*Circle either A or B for each line.*

	<i>Yes</i>	<i>No</i>
a) Something of mine was stolen.	A	B
b) I thought another student might hurt me.	A	B
c) Some of my friends had things stolen.	A	B
d) Some of my friends were hurt by other students.	A	B

17. To do well in math<s> 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>
a) lots of natural <talent/ability>.....	A	B	C	D
b) good luck.	A	B	C	D
c) lots of hard work studying at home.....	A	B	C	D
d) to memorize the textbook or notes.	A	B	C	D

18. 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>
a) lots of natural <talent/ability>.....	A	B	C	D
b) good luck.	A	B	C	D
c) lots of hard work studying at home.....	A	B	C	D
d) to memorize the textbook or notes.	A	B	C	D

19. 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>
a) math<s>?	A	B	C	D
b) science?	A	B	C	D

20. How much do you like using computers...*Circle one letter, A, B, C, or D, for each line.*

	<i>don't use computers</i>	<i>like a lot</i>	<i>like</i>	<i>dislike</i>	<i>dislike a lot</i>
a) in math<s> lessons?	A	B	C	D	E
b) in science lessons?	A	B	C	D	E

21. What do you think?*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>
a) I enjoy learning math<s>.	A	B	C	D
b) Math<s> is boring.	A	B	C	D
c) Math<s> is an easy subject.	A	B	C	D
d) I enjoy learning science.	A	B	C	D
e) Science is boring.	A	B	C	D
f) Science is an easy subject.	A	B	C	D

22. How often does this happen in your math<s> lessons?

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

	<i>most lessons</i>	<i>some lessons</i>	<i>never</i>
a) The teacher shows us how to do math<s> problems.	A	B	C
b) We copy notes from the board.	A	B	C
c) We have a quiz or test.	A	B	C
d) We work from worksheets or textbooks on our own.	A	B	C
e) We work on math<s> projects.	A	B	C
f) We use calculators.	A	B	C
g) We use computers.	A	B	C
h) We work together in pairs or small groups.	A	B	C
i) We use things from everyday life in solving math<s> problems.	A	B	C
j) The teacher gives us homework.	A	B	C
k) We can begin our homework in class.	A	B	C
l) The teacher checks homework.	A	B	C
m) We check each other's homework.	A	B	C
n) We discuss our completed homework.	A	B	C

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

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

	<i>most lessons</i>	<i>some lessons</i>	<i>never</i>
a) The teacher shows us how to do science problems.....	A	B	C
b) We copy notes from the board.	A	B	C
c) We have a quiz or test.	A	B	C
d) We work on science projects.	A	B	C
e) We work from worksheets or textbooks on our own.....	A	B	C
f) We use calculators.	A	B	C
g) We use computers.	A	B	C
h) We use things from every day life in solving science problems.	A	B	C
i) We work together in pairs or small groups.	A	B	C
j) The teacher gives us homework.	A	B	C
k) We can begin our homework in class.	A	B	C
l) The teacher checks homework.	A	B	C
m) We check each other's homework.	A	B	C
n) We discuss our completed homework.	A	B	C
o) The teacher gives a demonstration of an experiment.	A	B	C
p) We ourselves do an experiment in class.	A	B	C

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

INTERNATIONAL OPTION

24. 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>
a) read a book or magazine	A	B	C	D
b) visit a museum or art exhibition.....	A	B	C	D
c) attend a concert	A	B	C	D
d) go to the theatre	A	B	C	D
e) go to the movies	A	B	C	D

25. 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>
a) news or documentaries.....	A	B	C	D
b) opera, ballet or classical music	A	B	C	D
c) nature, wildlife or history	A	B	C	D
d) popular music	A	B	C	D
e) sports	A	B	C	D
f) video games	A	B	C	D
g) cartoons	A	B	C	D
h) comedy, adventure or suspense	A	B	C	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 2

Teacher Background Questionnaire (TQ1)



Identification Label

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

IEA Third International Mathematics and Science Study

Teacher Questionnaire Population 1

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

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

Some of the questions in this questionnaire ask about **your class**. This is the class which is identified at the top of this page, and which will be tested as part of TIMSS 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 02167
USA

(Institute Address)

Doc. Ref.: ICC879NRC416
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GENERAL DIRECTIONS:

1. Identify a place and a time when you will be able to complete the questionnaire without being interrupted. The questionnaire has been designed to be completed within 60 minutes by most teachers. However, the amount of time you will need may be either more or less. 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.
3. Several items ask you to think of a recent class <hour/period> as you respond. In responding to these items, choose a recent class <hour/period> with your class which you can recall in some detail and which was fairly typical of what occurs in your classroom i.e. a class <hour/period> which was not affected by special events such as assemblies, guests, student testing other than short quizzes, or any other unusual circumstances. Remember, “your class” is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS in your school.
4. 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!

1. How old are you?*Check one box only.*

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

2. Are you female or male?*Check one box only.*

- female ☐
- male ☐

3. What is the highest level of formal education you have completed?*Check one box only.*

- <TEACHER TRAINING W/O COMPLETING SECONDARY> ☐
- <SECONDARY ONLY> ☐
- <SECONDARY + 1 OR 2 YEAR TEACHER TRAINING> ☐
- <SECONDARY AND 3 OR 4 YEAR TEACHER TRAINING> ☐
- <BA OR EQUIVALENT + NO TEACHER TRAINING> ☐
- <BA OR EQUIVALENT + TEACHER TRAINING> ☐
- <MA/PHD WITH NO TEACHER TRAINING> ☐
- <MA/PHD + TEACHER TRAINING> ☐

4. At which grade levels are you teaching Mathematics during this school year?

NRC Note: <List only country-specific grades and their appropriate designations.>

Check one box in each row.

<input type="checkbox"/> Do not teach mathematics this year		
	Yes	No
a) <PRE-KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
b) <KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
c) <GRADE 1>	<input type="checkbox"/>	<input type="checkbox"/>
d) <GRADE 2>	<input type="checkbox"/>	<input type="checkbox"/>
e) <GRADE 3>	<input type="checkbox"/>	<input type="checkbox"/>
f) <GRADE 4>	<input type="checkbox"/>	<input type="checkbox"/>
g) <GRADE 5>	<input type="checkbox"/>	<input type="checkbox"/>
h) <GRADE 6>	<input type="checkbox"/>	<input type="checkbox"/>
i) <GRADE 7>	<input type="checkbox"/>	<input type="checkbox"/>
j) <GRADE 8>	<input type="checkbox"/>	<input type="checkbox"/>
k) <GRADE 9>	<input type="checkbox"/>	<input type="checkbox"/>
l) <GRADE 10>	<input type="checkbox"/>	<input type="checkbox"/>
m) <GRADE 11>	<input type="checkbox"/>	<input type="checkbox"/>
n) <GRADE 12>	<input type="checkbox"/>	<input type="checkbox"/>
o) <GRADE 13>	<input type="checkbox"/>	<input type="checkbox"/>

5. At which grade levels are you teaching Science during this school year?

NRC Note: <List only country-specific grades and their appropriate designations.>

Check one box in each row.

<input type="checkbox"/> Do not teach science this year		
	Yes	No
a) <PRE-KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
b) <KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
c) <GRADE 1>	<input type="checkbox"/>	<input type="checkbox"/>
d) <GRADE 2>	<input type="checkbox"/>	<input type="checkbox"/>
e) <GRADE 3>	<input type="checkbox"/>	<input type="checkbox"/>
f) <GRADE 4>	<input type="checkbox"/>	<input type="checkbox"/>
g) <GRADE 5>	<input type="checkbox"/>	<input type="checkbox"/>
h) <GRADE 6>	<input type="checkbox"/>	<input type="checkbox"/>
i) <GRADE 7>	<input type="checkbox"/>	<input type="checkbox"/>
j) <GRADE 8>	<input type="checkbox"/>	<input type="checkbox"/>
k) <GRADE 9>	<input type="checkbox"/>	<input type="checkbox"/>
l) <GRADE 10>	<input type="checkbox"/>	<input type="checkbox"/>
m) <GRADE 11>	<input type="checkbox"/>	<input type="checkbox"/>
n) <GRADE 12>	<input type="checkbox"/>	<input type="checkbox"/>
o) <GRADE 13>	<input type="checkbox"/>	<input type="checkbox"/>

6. Do you teach part-time or full-time?*Check one.*

Part-time ☐

Full-time ☐

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

8. At which of these grade levels have you taught in the past 5 years?

NRC Note: <List only country-specific grades and their appropriate designations.>

Check one box in each row.

	Yes	No
a) <PRE-KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
b) <KINDERGARTEN>	<input type="checkbox"/>	<input type="checkbox"/>
c) <GRADE 1>	<input type="checkbox"/>	<input type="checkbox"/>
d) <GRADE 2>	<input type="checkbox"/>	<input type="checkbox"/>
e) <GRADE 3>	<input type="checkbox"/>	<input type="checkbox"/>
f) <GRADE 4>	<input type="checkbox"/>	<input type="checkbox"/>
g) <GRADE 5>	<input type="checkbox"/>	<input type="checkbox"/>
h) <GRADE 6>	<input type="checkbox"/>	<input type="checkbox"/>
i) <GRADE 7>	<input type="checkbox"/>	<input type="checkbox"/>
j) <GRADE 8>	<input type="checkbox"/>	<input type="checkbox"/>
k) <GRADE 9>	<input type="checkbox"/>	<input type="checkbox"/>
l) <GRADE 10>	<input type="checkbox"/>	<input type="checkbox"/>
m) <GRADE 11>	<input type="checkbox"/>	<input type="checkbox"/>
n) <GRADE 12>	<input type="checkbox"/>	<input type="checkbox"/>
o) <GRADE 13>	<input type="checkbox"/>	<input type="checkbox"/>

9. APPROXIMATELY how many hours per week do you normally spend on each of the following activities outside the formal school day?

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>
a) preparing or grading student tests or exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) reading and grading other student work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) planning lessons by yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
e) meeting with parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
g) keeping students' records up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>

10. 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	<input type="checkbox"/>
once or twice a year	<input type="checkbox"/>
every other month	<input type="checkbox"/>
once a month	<input type="checkbox"/>
once a week	<input type="checkbox"/>
two or three times a week	<input type="checkbox"/>
almost every day	<input type="checkbox"/>

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

Check one box in each row.

	<i>not important</i>	<i>somewhat important</i>	<i>very important</i>
a) remember formulas and procedures.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) think in a sequential and procedural manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) understand mathematical concepts, principles, and strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) be able to think creatively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) understand how mathematics is used in the real world	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) be able to provide reasons to support their solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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>
a) Mathematics is primarily an abstract subject.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Mathematics is primarily a formal way of representing the real world.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
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"/>
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"/>
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"/>
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"/>
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"/>
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"/>

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>
a) <THE NATIONAL CURRICULUM GUIDE FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <THE NATIONAL CURRICULUM GUIDE FOR SCIENCE>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <THE RELEVANT REGIONAL CURRICULUM GUIDE(S)>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) <THE SCHOOL CURRICULUM GUIDE>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) <THE NATIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) <THE REGIONAL EXAMINATION SPECIFICATIONS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) <THE NATIONAL PEDAGOGY GUIDE FOR MATHEMATICS>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) <THE NATIONAL PEDAGOGY GUIDE FOR SCIENCE>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N.B.: In many of the questions which follow, a reference is made to your class. This is the class which is identified on the front of this questionnaire, and which will be tested as part of TIMSS in your school.

14. How many students are in your class?

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

boys _____ girls _____

15. Compared with other students in <country> at this grade level, estimate what percent of students in your class have:

Please write a number.

- a) high achievement levels (i.e. in the top third nationally) %
- b) middle achievement levels (middle third nationally) %
- c) low achievement levels (bottom third nationally) %
- TOTAL** 100%

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

Please write in a number.

_____ minutes

NRC Note: **TEXTBOOKS** <Insert the country specific textbook list used in the TIMSS document analysis. If the TIMSS document analysis list is not exhaustive of all texts used in your country, use the open-ended question (option 2). The open-ended option may be used alone or in conjunction with the TIMSS document analysis list.>

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

Check one box.

Yes ☐ No ☐

Option 1

If YES, which of the following textbooks do you use most?

	<i>Yes</i>	<i>No</i>
a) <COUNTRY SPECIFIC TEXT>	<input type="checkbox"/>	<input type="checkbox"/>
b) <COUNTRY SPECIFIC TEXT>	<input type="checkbox"/>	<input type="checkbox"/>
c) <COUNTRY SPECIFIC TEXT>	<input type="checkbox"/>	<input type="checkbox"/>
d) <COUNTRY SPECIFIC TEXT>	<input type="checkbox"/>	<input type="checkbox"/>

Option 2

If YES, write in the title, author, etc. of the textbook you use most.

Title: _____

Author (Publisher): _____

Year: _____

Other: _____

18. Approximately what percentage of your weekly mathematics teaching time is based on the text(s) indicated in the previous question?

Check one box.

0 - 25%	<input type="checkbox"/>
26 - 50%	<input type="checkbox"/>
51 - 75%	<input type="checkbox"/>
76 - 100%	<input type="checkbox"/>

19. Do you divide your class into groups for teaching mathematics?

Check one box.

- never ☐
- sometimes ☐
- always ☐
-

20. In your view to what extent do the following limit how you teach your 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>
a) students with different academic abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
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"/>
d) uninterested students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) disruptive students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) parents interested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) parents uninterested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) shortage of computer hardware	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) shortage of computer software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) shortage of other instructional equipment for students' use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) shortage of equipment for your use in demonstrations and other exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) inadequate physical facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) high student/teacher ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) low morale among fellow teachers/administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) low morale among students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) threat(s) to personal safety or the safety of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. How many of your students have access to calculators during mathematics lessons?

Check one.

- | | |
|----------------------------|--------------------------|
| almost all | <input type="checkbox"/> |
| about three quarters | <input type="checkbox"/> |
| about half | <input type="checkbox"/> |
| about one quarter | <input type="checkbox"/> |
| none | <input type="checkbox"/> |

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

Check one box for each row.

- | | <i>almost
every
day</i> | <i>once or
twice a
week</i> | <i>once or
twice a
month</i> | <i>never,
or hardly
ever</i> |
|------------------------------------|---------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| a) Checking answers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Tests and exams | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Routine computation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Solving complex problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Exploring number concepts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

23. When planning mathematics lessons, how much do you rely on:

Check one box for each row.

- | | <i>not
at all</i> | <i>a
little</i> | <i>quite a
lot</i> | <i>a great
deal</i> |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| a) your own previously prepared lessons | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) a written plan compiled by teachers in the school | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) other teachers or math specialists in your school/department | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) student textbooks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) other textbooks or resource books | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) teacher guides or teacher edition of textbook ... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) external examinations or standardized tests | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

24. 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.

	<i><National or Regional Examination Specifications></i>	<i><National or Regional Curriculum Guide></i>	<i><School Curriculum Guide></i>	<i>Teacher Edition of Textbook</i>	<i>Student Edition of Textbook</i>	<i>Other Resource Books</i>
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"/>
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"/>
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"/>
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"/>

Mathematics Topics

On the following pages there is a list of mathematics topics. Each topic is illustrated by a short list of subtopics. Not all topics are necessarily appropriate for your class. Nevertheless, please respond to the entire list so that we may obtain an indication of topics covered in your class that is as complete and accurate as possible.

- *Before marking anything, read quickly through the entire list to obtain an idea of where various topics may be found. Be sure to read the four examples on the next page.*
- *If you **have taught** a topic to your class, check the appropriate box indicating the total number of <periods> in which the topic was taught. Four choices are provided: 1-5 <periods>, 6-10 <periods>, 11-15 <periods>, and > 15 (i.e., more than 15) <periods>.*
- *If you **will continue to teach or begin teaching** a topic in future lessons this year, check the box in the “will teach later this year” column.*
- *If you have **not taught** a topic and will not teach it this year to your class, check the box in the “not taught this year” column.*
- *If you know that a topic was taught to your students in a **PREVIOUS YEAR**, check the box in the “taught in a previous year” column.*
- *If you have taught ANY of the subtopics listed under a major topic, indicate that you have taught that major topic area. Subtopics are listed for illustration purposes.*
- *For a few main topics, you are asked to indicate whether you have taught certain subtopics as well as the main topic, since these subtopics are of special interest in this study.*

EXAMPLES:

NRC Note: <Use country-specific appropriate designation for class
<period/hour>.

**How long did you spend teaching each of these topics to your class this year?
Will you cover any of these topics in future <periods>?**

Check as many boxes as apply for each topic listed.

	<i>have taught this year <periods> completed</i>				<i>will teach later this year</i>	<i>not taught this year</i>	<i>taught a previous year</i>
	<i>1-5</i>	<i>6-10</i>	<i>11-15</i>	<i>> 15</i>			
Example 1. You have not taught this topic and will not teach it this year:							
a) Linear Equations and Algebra Representing numerical situations; solutions of simple equations; use of algebraic expressions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Example 2. You have taught this topic in 2 class <periods> and know it was taught in a previous year as well:							
b) Measurement Units and Processes Ideas of measurement and units; standard (metric) units; length, area, volume, capacity, time, money and so on; use of measurement instruments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Example 3. You have taught this topic in 8 class <periods> and will teach it in future <periods>:							
c) Percentages Concepts of percentage; computations with percentage; types of percentage problems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example 4. You have not taught this topic but will teach it in future <periods>:							
d) Problem Solving Strategies Problem solving heuristics and strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. How long did you spend teaching each of these topic areas to your class this year? Will you cover any of these topics in future <periods>?

Check as many boxes as apply for each topic listed.

TOPIC	have taught this year <periods> completed				will teach later this year	not taught this year	taught a previous year
	1-5	6-10	11-15	> 15			
a) Whole Numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>							
1. Place value and numeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Whole number meanings, operations, and properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Common and Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>							
1. Meaning, Representation and Uses of Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Operations of Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Properties of Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Meaning, Representation and Uses of Common Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Operations of Common Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Properties of Common Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Relationships Between Common and Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Finding Equivalent Fractions & Forms .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Ordering of Fractions (Common And Decimals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Percentages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concepts of percentage; computations with percentage; types of percentage problems							
d) Number Sets and Concepts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integers (negative as well as positive); rational, real, and other number sets; number bases other than ten; exponents							
e) Number Theory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime numbers; factors of whole numbers; greatest common divisors; least common multiples; permutations; combinations; systematic counting							
f) Estimation and Number Sense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estimating quantity and size; rounding and significant figures, estimating the results of computations (including mental arithmetic and deciding if solutions are reasonable); scientific notation							

TOPIC	<i>have taught this year</i> <i><periods> completed</i>				<i>will teach later this year</i>	<i>not taught this year</i>	<i>taught a previous year</i>
	<i>1-5</i>	<i>6-10</i>	<i>11-15</i>	<i>> 15</i>			
g) Measurement Units and Processes Ideas of measurement and units; standard (metric) units; length, area, volume, capacity, time, money and so on; use of measurement instruments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Estimation and Error of Measurements Estimation of measurements other than perimeter and area; precision, accuracy, and errors of measurement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Perimeter, Area and Volume Perimeter & area of triangles, quadrilaterals, circles and other two-dimensional shapes; calculating, estimating, and solving problems involving perimeters and areas; surface area and volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Basics of One and Two Dimensional Geometry Number lines and graphs in two dimensions; triangles, quadrilaterals, other polygons, and circles; equations of straight lines; Pythagorean Theorem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Congruence and Similarity Concepts, properties and uses of congruent and similar figures, especially for triangles, squares, rectangles, and, other plane shapes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Transformations and Symmetry Patterns; tessellations; symmetry in geometric figures; symmetry of number patterns; transformations and their properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Three Dimensional Figures and Constructions..... Constructions with compass and straight edge; three-dimensional geometry; conic sections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) Ratio and Proportion <i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Concepts and meaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Applications and uses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maps and models; solving practical problems based on proportionality; solving proportional equations							

TOPIC	have taught this year <periods> completed				will teach later this year	not taught this year	taught a previous year
	1-5	6-10	11-15	> 15			
o) Functions, Relations, and Patterns Number patterns; properties, uses, and graphs of functions; problems involving functions relations and their properties;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) Equations and Formulas <i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Linear equations and formulas Representing linear numerical situations; solving simple linear equations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Representing other numerical situations solving other simple equations; use of algebraic expressions and inequalities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q) Data Representation and Statistics Collecting data from experiments and simple surveys; representing and interpreting data (tables, charts, plots, and graphs); means, medians and other simple statistics; samples; uses and misuses of simple statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r) Probability Concepts of "more likely" and "less likely"; computing probabilities (including informal computation or estimation of probabilities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s) Sets and Logic Sets, set notation and set operations; classification; logic and truth tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t) Problem Solving Strategies Problem solving heuristics and strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u) Other Mathematics Content Mark here for all content not in one of the earlier categories. This includes advanced topics such as: Computers (flow charts, programming languages, programs); history and nature of mathematics; proofs and advanced mathematics topics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Think of the last <lesson> in which you taught mathematics to your class. (If this lesson was atypical, e.g. an examination or a field trip, pick the previous one.)

26a. How many minutes was this class <hour/period>?

Please write in a number.

_____ minutes

26b. For each of the following mathematics topics, indicate if it was the subject of this lesson.

Check one box in each row.

	<i>Yes</i>	<i>No</i>
1. Whole Numbers	<input type="checkbox"/>	<input type="checkbox"/>
2. Common Fractions	<input type="checkbox"/>	<input type="checkbox"/>
3. Decimal Fractions	<input type="checkbox"/>	<input type="checkbox"/>
4. Percentages	<input type="checkbox"/>	<input type="checkbox"/>
5. Other Number Sets and Concepts	<input type="checkbox"/>	<input type="checkbox"/>
6. Number Theory	<input type="checkbox"/>	<input type="checkbox"/>
7. Estimation and Number Sense	<input type="checkbox"/>	<input type="checkbox"/>
8. Measurement Units and Processes	<input type="checkbox"/>	<input type="checkbox"/>
9. Perimeter, Area and Volume	<input type="checkbox"/>	<input type="checkbox"/>
10. Basics of One and Two Dimensional Geometry	<input type="checkbox"/>	<input type="checkbox"/>
11. Geometric Congruence and Similarity	<input type="checkbox"/>	<input type="checkbox"/>
12. Geometric Transformations and Symmetry	<input type="checkbox"/>	<input type="checkbox"/>
13. Three Dimensional Geometry and Constructions	<input type="checkbox"/>	<input type="checkbox"/>
14. Ratio and Proportion	<input type="checkbox"/>	<input type="checkbox"/>
15. Functions, Relations and Patterns	<input type="checkbox"/>	<input type="checkbox"/>
16. Equations, Inequalities and Algebraic Formulas	<input type="checkbox"/>	<input type="checkbox"/>
17. Probability and Statistics	<input type="checkbox"/>	<input type="checkbox"/>
18. Sets and Logic	<input type="checkbox"/>	<input type="checkbox"/>
19. Problem Solving Strategies	<input type="checkbox"/>	<input type="checkbox"/>
20. Other Mathematics Content	<input type="checkbox"/>	<input type="checkbox"/>

26c. Was this lesson...

Check one box in each row.

	<i>Yes</i>	<i>No</i>
1. the introduction of this topic	<input type="checkbox"/>	<input type="checkbox"/>
2. a continuation of a previous lesson on the same topic	<input type="checkbox"/>	<input type="checkbox"/>
3. the end of the coverage of this topic	<input type="checkbox"/>	<input type="checkbox"/>

26d. Did you assign homework after the class <hour/period>?*Check one box.*Yes ☐ No ☐**26e. If yes, how long would it take a typical student to complete this homework?***Please write in a number.*

_____ minutes

Think of the same mathematics class <hour/period>.

27a. How did the lesson proceed?

The following presents a list of activities that may occur during a lesson. Although the list is not exhaustive of what happens in a classroom, most classroom activities may be considered as variations of those listed below. Using this list, indicate how your lesson developed. In the blanks on the right, write in the order in which the activities used in the lesson took place (1 = first, 2 = second, and so on) and estimate the amount of time you spent on each one. Ignore activities you used that do not fit into the descriptions listed. Write in the order and the approximate number of minutes for each activity. NOTE: If you did not do a certain activity write zero in the blank next to it.

	<i>order</i>	<i>minutes</i>
• review of previous lesson(s)	_____	_____
• a short quiz or test to review previous lesson	_____	_____
• oral recitation or drill (students responding aloud)	_____	_____
• review or correction of previous lesson's homework	_____	_____
• introduction of a topic (class discussion, teacher explanation/demonstration, film, video, use of concrete materials etc.)	_____	_____
• development of a topic (class discussion, teacher explanation/demonstration, group problem solving, film, video, etc.)	_____	_____
• small group activities (with or without teacher)	_____	_____
• students do paper-and-pencil exercises related to topic (not the same as homework)	_____	_____
• assignment of student homework	_____	_____
• students work on homework in class	_____	_____
• student laboratory or data collection activity (not a separate laboratory hour) or hands-on session	_____	_____

27b. In this class <hour/period> did the students work in small groups?

Check one box.

- none of the time ☐
- some of the time ☐
- all the time ☐

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

Check one box in each row.

- | | <i>never
or almost
never</i> | <i>some
lessons</i> | <i>most
lessons</i> | <i>every
lesson</i> |
|--|--------------------------------------|--------------------------|--------------------------|--------------------------|
| a) explain the reasoning behind an idea | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) represent and analyze relationships using tables, charts, or graphs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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"/> |
| d) use computers to solve exercises or problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) write equations to represent relationships | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) practice computational skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

29. In your mathematics lessons, how frequently do you do the following when a student gives an incorrect response during a class discussion?

Check one box in each row.

- | | <i>never
or almost
never</i> | <i>some
lessons</i> | <i>most
lessons</i> | <i>every
lesson</i> |
|---|--------------------------------------|--------------------------|--------------------------|--------------------------|
| a) correct the student's error in front of the class | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) ask the student another question to help him or her get the correct response | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) call on another student who's likely to give the correct response | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) call on other students to get their responses and then discuss what is correct | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

30. 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>
a) work individually without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) work individually with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
d) work together as a class with students responding to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) work in pairs or small groups without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) work in pairs or small groups with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. How often do you usually assign mathematics homework?*Check one box.*

never	<input type="checkbox"/>
less than once a week	<input type="checkbox"/>
once or twice a week	<input type="checkbox"/>
3 or 4 times a week	<input type="checkbox"/>
every day	<input type="checkbox"/>

32. If you assign mathematics homework, how many minutes of homework do you usually assign your students? (Consider the time it would take an average student in your class.)*Check one box.*

I do not assign homework	<input type="checkbox"/>
less than 15 minutes	<input type="checkbox"/>
15-30 minutes	<input type="checkbox"/>
31-60 minutes	<input type="checkbox"/>
61-90 minutes	<input type="checkbox"/>
more than 90 minutes	<input type="checkbox"/>

33. 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>	<i>I do not assign homework</i>
a) worksheets or workbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) problem/question sets in textbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) reading in a textbook or supplementary materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) writing definitions or other short writing assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) small investigation(s) or gathering data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) working individually on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) working as a small group on long term projects or experiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) finding one or more uses of the content covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) preparing oral reports either individually or as a small group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) keeping a journal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Check one box in each row.

	<i>never</i>	<i>rarely</i>	<i>sometimes</i>	<i>always</i>	<i>I do not assign homework</i>
a) record whether or not the homework was completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) collect, correct and keep assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) collect, correct assignments and then return to students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) give feedback on homework to whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) have students correct their own assignments in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) have students exchange assignments and correct them in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) use it as a basis for class discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) use it to contribute towards students' grades or marks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35. Is science taught mainly as a separate subject (i.e., not integrated with other subjects) to your class?

Check one box.

Yes ☐ No ☐

a) If YES...

how many minutes per week is science taught to your class?

Please write in a number.

_____ minutes

b) If NO...

please estimate on average about how many minutes per week are spent on science related instruction.

Please write in a number.

_____ minutes

36. In your 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>
a) work individually without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) work individually with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
d) work together as a class with students responding to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) work in pairs or small groups without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) work in pairs or small groups with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SCIENCE TOPICS

On the following pages there is a list of science topics. Each topic is illustrated by a short list of subtopics. Not all topics are necessarily appropriate for your class. Nevertheless, please respond to the entire list so that we may obtain an indication of topics covered in your class that is as complete and accurate as possible.

- *Before marking anything, read quickly through the entire list to obtain an idea of where various topics may be found.*
- *If you **have taught** a topic with your class, check the appropriate box indicating the total number of <periods> in which the topic was taught. Four choices are provided: 1-5 <periods>, 6-10 <periods>, 11-15 <periods>, and > 15 (i.e., more than 15) <periods>.*
- *If you **will continue or begin teaching** a topic in future lessons this year, check the box in the “will teach later this year” column.*
- *If you have **not taught** a topic and will not teach it this year to your class, check the box in the “not taught this year” column.*
- *If you know that a topic was taught to your students in a **PREVIOUS YEAR**, check the box in the “covered a previous year” column.*
- *If you have taught ANY of the subtopics listed under a major topic, indicate that you have taught that major topic area. Subtopics are listed for illustration purposes.*
- *For a few main topics, you are asked to indicate whether you have taught certain subtopics as well as the main topic since these subtopics are of special interest in this study.*

37. How long did you spend teaching each of these topic areas to your class this year? Will you cover any of these topics in future <periods>?

Check as many boxes as apply for each topic listed.

TOPIC	have taught this year <periods> completed				will teach later this year	not taught this year	taught a previous year
	1-5	6-10	11-15	> 15			
a) Earth Features	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>							
1. Layers of the earth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Landforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Bodies of water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Atmosphere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Rocks, soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Iceforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather maps; cloud formation; seasons of the year; types of precipitation; hurricanes and tornadoes							
c) Earth Processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcanoes and earthquakes; water and rock cycles							
d) Historic Earth Processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formation of fossils, fossil fuels; geologic timetable							
e) Earth in the Universe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planets, sun and their effects upon the earth; features of the solar system and universe; origin and history of the universe							
f) Diversity of Living Things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Types and classification of plants, animals, and microorganisms							
g) Human Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrition, vitamins and minerals; types, causes, and prevention of disease							
h) Human Biology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Indicate your coverage both at the main topic level and for each of the following subtopics.</i>							
1. Structures and functions of the body	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Metabolism, respiration, digestion and other bodily processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Reproduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Inheritance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOPIC	<i>have taught this year</i> <i><periods> completed</i>				<i>will teach later this year</i>	<i>not taught this year</i>	<i>taught a previous year</i>
	<i>1-5</i>	<i>6-10</i>	<i>11-15</i>	<i>> 15</i>			
i) Structure and Function of Living Things Types and features of cells; functions of organs and tissues (e.g., bird's wings, plant leaves, earthworm's circulatory system)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Life Processes and Systems Respiration; digestion; reactions of living things to stimuli; photosynthesis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Life Cycles and Genetics Life cycles of plants and animals; plant and animal reproduction; inheritance and variation; evolution and diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Interactions of Living Things Ecosystems; habitats, niches; food webs, food chains; oxygen, carbon dioxide cycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Environmental and Resource Issues Pollution; saving the rain forests; recycling garbage; effects of natural disasters; food supply and demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) Animal Behavior Migration; hibernation; social organization (e.g., elephant herds, beehives); communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) Matter Classification and structure of matter (e.g., elements, compounds, mixtures, atoms, molecules); physical and chemical properties (e.g., solids, liquids, gases; acids/bases)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) Energy Types, Sources, and Conversions Types of energy (e.g., mechanical, chemical); sources of energy (food, oil, wood); simple machines (e.g., levers, pulleys); work, efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q) Energy Processes Heat and temperature; sound, electricity, magnetism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r) Physical and Chemical Transformations Changes in states (e.g., freezing, boiling, evaporation); chemical changes (e.g., burning, rusting, batteries, radioactivity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s) Forces and Motion Gravity and friction; speed; acceleration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TOPIC	<i>have taught this year</i> <i><periods> completed</i>				<i>will teach later this year</i>	<i>not taught this year</i>	<i>taught a previous year</i>
	<i>1-5</i>	<i>6-10</i>	<i>11-15</i>	<i>> 15</i>			
t) Science, Technology, and Society Designing or making things (e.g., tools, bridges); use of technology in science (e.g., computers, microscopes); interactions among science, technology, and society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u) History of Science and Technology Famous scientists; classic experiments; development of scientific ideas; scientific discoveries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Nature of Science Methods scientists use (e.g., problem identification, observation, creating and testing hypotheses); basis and ways of making decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w) Measurement							
1. How to use tools to measure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How to use procedures to measure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Making measurements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x) Data Analysis							
1. Classifying, organizing and representing data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Students interpreting provided data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Students interpreting data they have collected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Students drawing conclusions from data they have collected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INTERNATIONAL OPTION

38. Was Teaching your first choice as a career when beginning university or teacher education college? Yes ☐ No ☐

39. Would you change to another career if you had the opportunity? Yes ☐ No ☐

40. Do you think that society appreciates your work? Yes ☐ No ☐

41. Do you think your students appreciate your work? Yes ☐ No ☐

42. Approximately how many books are in your home?

(Do not count magazines or newspapers.)

Check one box only.

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

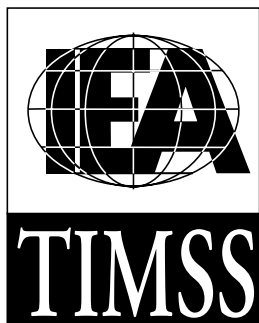
43. Please rank the following professions in order of social status. Assign a rank of '1' to the profession with the highest social status, and '9' to the profession with the lowest status.

- a) accountant _____
- b) <MEDICAL DOCTOR> _____
- c) lawyer _____
- d) engineer _____
- e) nurse _____
- f) senior <CIVIL SERVANT> _____
- g) teacher, primary school _____
- h) teacher, secondary school _____
- i) <UNSKILLED WORKER> _____

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

Section 3

School Background Questionnaire (SCQ1)



Identification Label

Stratum ID:

School ID:

IEA Third International Mathematics and Science Study

School Questionnaire Population 1

Your school has been selected to participate in the Third International Mathematics and Science Study (TIMSS), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS is investigating student achievement in mathematics and science in over fifty educational systems around the world. It is designed to measure and interpret differences in national educational 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 60 minutes to complete this questionnaire.

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

<insert country information here>

Your cooperation in completing this questionnaire is greatly appreciated.

TIMSS Study Center
Boston College
Chestnut Hill, MA 02167
USA

(Institute Address)

Doc. Ref.: ICC882/NRC419
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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. Which of the following grade levels are found in your school?

<List only country-specific grades and their appropriate designations.>

*each line.**Check one box in*

- | | Yes | No |
|-----------------------------|--------------------------|--------------------------|
| a) <Pre-kindergarten> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <Kindergarten> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) <Grade 1> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <Grade 2> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <Grade 3> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) <Grade 4> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) <Grade 5> | <input type="checkbox"/> | <input type="checkbox"/> |
| h) <Grade 6> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) <Grade 7> | <input type="checkbox"/> | <input type="checkbox"/> |
| j) <Grade 8> | <input type="checkbox"/> | <input type="checkbox"/> |
| k) <Grade 9> | <input type="checkbox"/> | <input type="checkbox"/> |
| l) <Grade 10> | <input type="checkbox"/> | <input type="checkbox"/> |
| m) <Grade 11> | <input type="checkbox"/> | <input type="checkbox"/> |
| n) <Grade 12> | <input type="checkbox"/> | <input type="checkbox"/> |
| o) <Grade 13> | <input type="checkbox"/> | <input type="checkbox"/> |

3. 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.

	<i>Number of FTEs</i>
a) Principals	_____
b) Assistant principals	_____
c) <Classroom teachers>	_____
d) Teacher aides	_____
e) Other professional staff	_____

4a. How many individual full-time <classroom teachers> are there in your school?

Write in a number: _____

4b. How many individual part-time <classroom teachers> are there in your school?

Write in a number: _____

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

percentage. Write

*Please indicate a
0 (zero) if none.*

_____%

6. What percentage of the <classroom teachers> teach...*percentage for each
of the following.**Please indicate a**Write 0 (zero) if none.*

- a) three quarters or more of their teaching load in mathematics _____%
- b) no mathematics _____%
- c) three quarters or more of their teaching load in science subjects _____%
- d) no science subjects _____%
- e) three quarters or more of their teaching load in mathematics AND
science subjects _____%
- f) no mathematics OR science subjects _____%

7. How long do students typically stay with the same teacher?*Check only one box.*

- One school year ☐
- Two school years ☐
- Three school years ☐
- Four or more school years ☐

8. During the school week, about how many hours of scheduled school time do teachers usually have for...*value. Please write**Write in a numeric
in 0 (zero) if no
time is scheduled.*

- a) tasks related to teaching mathematics (e.g.,
lesson preparation, grading homework, etc.) _____ hours/week
- b) teaching mathematics classes _____ hours/week
- c) tasks related to teaching science (e.g.,
lesson preparation, grading homework, etc.) _____ hours/week
- d) teaching science classes _____ hours/week

9. Cooperation and Collaboration:*Check only one box**for each.***Yes No**

- | | | |
|--|--------------------------|--------------------------|
| a) Does your school have an official policy related to promoting cooperation and collaboration among teachers? | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Are teachers in your school encouraged to share and discuss instructional ideas and materials? | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Do teachers in your school meet regularly to discuss instructional goals and issues? | <input type="checkbox"/> | <input type="checkbox"/> |

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

number of hours for each item.
Please write
spent on an activity.

*Please indicate the approximate**0 (zero) if no time is***hours
per month**

- | | |
|---|-------|
| a) Hiring teachers | _____ |
| b) Representing the school in the community | _____ |
| c) Representing the school at official meetings | _____ |
| d) Internal administrative tasks (e.g., regulations, school budget, timetable) | _____ |
| e) Teaching (including preparation) | _____ |
| f) Giving a demonstration lesson | _____ |
| g) Discussing educational objectives with teachers | _____ |
| h) Initiating curriculum revision and/or planning | _____ |
| i) Talking with parents | _____ |
| j) Counseling and disciplining of students | _____ |
| k) Responding to requests from <district>, <state>, or <national> education officials | _____ |
| l) Training teachers | _____ |
| m) Professional development activities | _____ |
| n) Other activities | _____ |

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

*Check **one** box in each line.*

	<i>not a school responsibility</i>	<i><school's governing board></i>	<i>principal teachers</i>	
a) Hiring teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Establishing disciplinary policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Establishing student grading policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Formulating the school budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Purchasing supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Placing students in classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Assigning teachers to classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Determining which textbooks are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Establishing homework policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Determining teacher salaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Establishing community relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Communicating with students' families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Determining course content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) Deciding which courses are offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. 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>
a) <National Curriculum Council>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <National Subject Association>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <educational region or district>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) <school governing board>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Principal/head of school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Teachers (collectively for the school)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Teachers (of same subject) as a group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Each teacher individually	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Church/religious groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Business community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Textbook publishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) External examinations/standardized tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) Teacher unions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. 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)?

in each line.

Check one box.

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

14. In your school, how many computers are...

each. Write 0 (zero) if there are none.

Write in a number for

a) available for use by teachers or students	_____
b) used by teachers for administrative purposes (e.g., grade reports, attendance, etc.)	_____
c) used by teachers during instructional time	_____
d) used by students for educational purposes	_____
e) used by office staff for school record keeping.	_____

15. 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>
a) Instructional materials (e.g., textbooks)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Budget for supplies (e.g., paper, pencils)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) School buildings and grounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Heating/cooling and lighting systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Instructional space (e.g., classrooms)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Special equipment for handicapped students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Computers for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Computer software for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Calculators for mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Library materials relevant to mathematics instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) Audio-visual resources for mathematics instruction .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) Science laboratory equipment and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) Computers for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) Computer software for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) Calculators for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) Library materials relevant to science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q) Audio-visual resources for science instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. 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> |
|---|-------------|--------------|
| 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? | _____ % | |
| c) About what percentage of students who begin the year in your school also finish the year in your school? | _____ % | |
| d) What percentage of the students in your school transfer into your school after the beginning of the school year? | _____ % | |

Concerning <L-GRADE> students...

- | | <i>boys</i> | <i>girls</i> |
|---|-------------|--------------|
| e) How many students are in <L-GRADE>? | _____ | _____ |
| f) How many students in <L-GRADE> are repeating the grade? | _____ | _____ |
| g) What is the approximate average class size in <L-GRADE>? | _____ | |
| h) How many <L-GRADE> students are in multi-grade classrooms? | _____ | |
| i) How many students in <L-GRADE> study mathematics? | _____ | _____ |
| j) How many students in <L-GRADE> study science? | _____ | _____ |

Concerning <U-GRADE> students...

- | | <i>boys</i> | <i>girls</i> |
|---|-------------|--------------|
| k) How many students are in <U-GRADE>? | _____ | _____ |
| l) How many students in <U-GRADE> are repeating the grade? | _____ | _____ |
| m) What is the approximate average class size in <U-GRADE>? | _____ | |
| n) How many <U-GRADE> students are in multi-grade classrooms? | _____ | |
| o) How many students in <U-GRADE> study mathematics? | _____ | _____ |
| p) How many students in <U-GRADE> study science? | _____ | _____ |

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

indicate the approximate percentage of

Check one box for each of the following and

<U-GRADE> students involved for each of the following.

	<i>rarely</i>	<i>monthly</i>	<i>weekly</i>	<i>daily</i>	
a) arriving late at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
b) absenteeism (i.e., unjustified absences) ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
c) skipping class <hours/periods>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
d) violating dress code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
e) classroom disturbance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
f) cheating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
g) profanity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
h) vandalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
i) theft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
j) intimidation or verbal abuse of other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
k) physical injury to other students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
l) intimidation or verbal abuse of teachers or staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %
m) physical injury to teachers or staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____ %

18. In your school:

*If the instructional time is the same for both <L-GRADE> and <U-GRADE> students in your school, check the box to the right and **respond only** to questions under the column for the upper grade* ☐

<L-GRADE> <U-GRADE>

- a) How many instructional days are in the school year? _____ _____ days
- b) How many **full** instructional days (over 4 hours) are there in the school week? _____ _____ days
- c) How many **half** instructional days (4 hours or less) are there in the school week? _____ _____ *half* days
- d) How many hours **in total** are there in the school week? (*Include lunch breaks, study hall time, and after school activities*) _____ _____ hours
- e) How many **instructional** hours 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>?

Check one

Yes ☐ **No** ☐

If yes,

<L-GRADE> <U-GRADE>

- a) How many **instructional** periods are there in a week? _____ _____ periods
- b) How many minutes is a typical instructional period? _____ _____ minutes

20. Does your school provide REMEDIAL TEACHING in MATHEMATICS?

Check one

Yes ☐ **No** ☐

If yes, how is this organized?

	<i>Yes</i>	<i>No</i>
a) Groups are formed within regular mathematics class	<input type="checkbox"/>	<input type="checkbox"/>
b) Students are withdrawn from their regular mathematics class	<input type="checkbox"/>	<input type="checkbox"/>
c) Students receive extra <tuition> before or after school	<input type="checkbox"/>	<input type="checkbox"/>
d) Other	<input type="checkbox"/>	<input type="checkbox"/>

21. Does your school provide REMEDIAL TEACHING in SCIENCE?

Check one

Yes ☐ **No** ☐

If yes, how is this organized?

	<i>Yes</i>	<i>No</i>
a) Groups are formed within regular science class	<input type="checkbox"/>	<input type="checkbox"/>
b) Students are withdrawn from their regular science class	<input type="checkbox"/>	<input type="checkbox"/>
c) Students receive extra <tuition> before or after school	<input type="checkbox"/>	<input type="checkbox"/>
d) Other	<input type="checkbox"/>	<input type="checkbox"/>

22. Does your school provide SPECIAL ENRICHMENT activities in MATHEMATICS for advanced students?

Check one

Yes ☐ **No** ☐

If yes, how is this organized?

	<i>Yes</i>	<i>No</i>
a) Groups are formed within regular mathematics class	<input type="checkbox"/>	<input type="checkbox"/>
b) Students are withdrawn from their regular mathematics class	<input type="checkbox"/>	<input type="checkbox"/>
c) Students receive extra <tuition> before or after school	<input type="checkbox"/>	<input type="checkbox"/>
d) Other	<input type="checkbox"/>	<input type="checkbox"/>

23. Does your school provide SPECIAL ENRICHMENT activities in SCIENCE?

Check

one

Yes ☐ No ☐

If yes, how is it organized?

Yes No

- | | | |
|--|--------------------------|--------------------------|
| a) Groups are formed within regular science class | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Students are withdrawn from their regular science class | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Students receive extra <tuition> before or after school | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Other | <input type="checkbox"/> | <input type="checkbox"/> |

24. Do all students in <U-GRADE> follow the same course of study in mathematics?

Check one

Yes ☐ No ☐

If yes, then...

- | | | |
|--|-------|---------|
| a) how many instructional minutes per week are students in the <U-GRADE> REQUIRED to spend in mathematics classes? | _____ | minutes |
| b) how many instructional weeks per year are students in the <U-GRADE> REQUIRED to spend in mathematics classes? | _____ | weeks |

If no, then...

- | | | |
|--|-------|---------|
| c) how many different courses of study in mathematics are available to <U-GRADE> students | _____ | courses |
| d) what percentage of <U-GRADE> students take... | | |
| 1. the most advanced mathematics course of study | _____ | % |
| 2. the least advanced mathematics course of study | _____ | % |
| e) what is the total number of instructional minutes per week for those <U-GRADE> students who take... | | |
| 1. the most advanced mathematics course of study | _____ | minutes |
| 2. the least advanced mathematics course of study | _____ | minutes |
| f) what is the total number of instructional weeks per year for those <U-GRADE> students who take... | | |
| 1. the most advanced mathematics course of study | _____ | weeks |
| 2. the least advanced mathematics course of study | _____ | weeks |

- 25. 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 for each of the following.

	<i>not important</i>	<i>somewhat important</i>	<i>moderately important</i>	<i>very important</i>	<i>Not applicable</i>
a) academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) performance on a standardized test.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) performance on an entrance examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) performance on an oral examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) teacher recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) parental wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) the student's own wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) curricular requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Do all students in <U-GRADE> follow the same course of study in science?*Check one***Yes** ☐ **No** ☐**If yes, then...**

- a) how many instructional minutes per week are students in the <U-GRADE> REQUIRED to spend in science classes? *minutes*
- b) how many instructional weeks per year are students in the <U-GRADE> REQUIRED to spend in science classes? *weeks*

If no, then...

- c) how many different courses of study in science are available to <U-GRADE> students? *courses*
- d) what percentage of <U-GRADE> students take...
1. the most advanced science course of study %
 2. the least advanced science course of study %
- e) what is the total number of instructional minutes per week for those <U-GRADE> students who take...
1. the most advanced science course of study *minutes*
 2. the least advanced science course of study *minutes*
- f) what is the total number of instructional weeks per year for those <U-GRADE> students who take...
1. the most advanced science course of study *weeks*
 2. the least advanced science course of study *weeks*

- 27. 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 for each of the following.

	<i>not important</i>	<i>somewhat important</i>	<i>moderately important</i>	<i>very important</i>	<i>Not applicable</i>
a) academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) performance on a standardized test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) performance on an entrance examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) performance on an oral examination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) teacher recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) parental wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) the student's own wishes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) curricular requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

International Option

28. Approximately what percentage of the students in your school...

*each of the following.
Write 0 (zero) if there are*

Indicate a percentage for

none.

- | | |
|---|---------|
| a) come from <disadvantaged economic backgrounds> | _____ % |
| b) come from homes where neither parent received more than
primary education | _____ % |
| c) come from one-parent families | _____ % |
| d) attended preschool | _____ % |
| e) have a first language different from the language taught in the
school | _____ % |
| f) have learning problems | _____ % |
| g) have health problems | _____ % |
| h) have nutrition problems | _____ % |

NRC Note: <disadvantaged economic backgrounds> must be defined by NRCs in a way that is meaningful in their countries. It is understood that such a definition is not always possible.

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

in each line

Check only one box

- | | Yes | No |
|---|--------------------------|--------------------------|
| a) Residence in a particular area | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Student's academic performance | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Interview with student | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Interview with parent(s) | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Preference given to students with older brothers or sisters
in the school | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Preference given according to date of application | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Recommendation of previous teachers | <input type="checkbox"/> | <input type="checkbox"/> |
| h) Preference given to students from a particular school | <input type="checkbox"/> | <input type="checkbox"/> |
| i) Preference given to children of former students | <input type="checkbox"/> | <input type="checkbox"/> |
| j) Performance on a standardized test | <input type="checkbox"/> | <input type="checkbox"/> |
| k) Performance on an entrance examination | <input type="checkbox"/> | <input type="checkbox"/> |
| l) Performance on an oral examination | <input type="checkbox"/> | <input type="checkbox"/> |
| m) Other | <input type="checkbox"/> | <input type="checkbox"/> |

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