TEACHER QUESTIONNAIRE

Grade 8 – Science

During the next few weeks, some of your eighth-grade students will be assessed in mathematics and science as part of the 2000 National Assessment of Educational Progress (NAEP). In addition to surveying students' achievement in these subjects, NAEP collects information from teachers about their instructional practices in order to investigate the relationship between achievement and instruction.

You have been identified as the person who teaches science to one or more students in the assessment. In this questionnaire, you will be asked about your background and about the classes where science is taught to these students.

Only you can provide information about the instruction these students receive, and your answers are very important. Although you are very busy, we urge you to complete this questionnaire as accurately as possible.

The information you provide is being collected for research purposes only and will be kept strictly confidential. NAEP is authorized under Public Law 103-382. While your participation is voluntary, your responses to these questions are needed to make the survey accurate and complete.

Instructions

This questionnaire contains three parts.

Part I – Background, Education, and Resources

Part IIA – Science Preparation

Part IIB – Science Instructional Information

You should complete all parts of the questionnaire. For Part IIB, answer questions about only the class periods indicated on the front cover. Please record your answers directly in this questionnaire by filling in the appropriate ovals.

Because more than one of your classes may contain students who have been selected for the assessment, some of the questions in Part IIB provide space for you to supply information for up to five different classes.

If you teach one class of students all day, this should be called class period "1" on the front cover and throughout this questionnaire.

If your class schedule changes from day to day, the class periods identified refer to your Monday schedule.

When you are finished, please return the questionnaire to your school's NAEP coordinator.

THANK YOU VERY MUCH.

Part I: Background, Education, and Resources

There are 16 questions in this section.

HE001004

1. What is your gender?

   Ⓐ Male

   Ⓑ Female

LD001610

1a. Which best describes you?

   Ⓐ White (not Hispanic)

   Ⓑ Black (not Hispanic)

   Ⓒ Hispanic (“Hispanic” means someone who is from a Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish or Hispanic background.)

   Ⓓ Asian or Pacific Islander (“Asian or Pacific Islander” means someone who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, or other Asian or Pacific Island background.)

   Ⓔ American Indian or Alaskan Native (“American Indian or Alaskan Native” means someone who is from one of the American Indian tribes, or one of the original people of Alaska.)

   Ⓕ Other (specify) _____

HE001007

2. Counting this year, how many years in total (include part-time teaching) have you taught at either the elementary or secondary level?

   Ⓐ 2 years or less

   Ⓑ 3-5 years

   Ⓒ 6-10 years

   Ⓓ 11-24 years

   Ⓔ 25 years or more

QK070732

3. Counting this year, how many years in total have you taught science? (Include any permanent, full-time, or part-time assignments, but not substitute assignments).

   Ⓐ 2 years or less

   Ⓑ 3-5 years

   Ⓒ 6-10 years

   Ⓓ 11-24 years

   Ⓔ 25 years or more

HE002551

4. What type of teaching certificate do you have in this state in your main assignment field?

   Ⓐ Advanced professional certificate

   Ⓑ Regular or standard state certificate (standard certificate offered in state)

   Ⓒ Probationary state certificate (the initial certificate issued after satisfying all requirements except completion of a probationary period)

   Ⓓ Temporary, provisional, or emergency state certificate

   Ⓔ Certification by an accreditation body other than the state

   Ⓕ I don't have a certificate in my main assignment field.

HE001009

5. Do you have teaching certification in any of the following areas that is recognized by the state in which you teach? Fill in **one** oval on each line.

	Yes	No	Not Offered in My State	
a. Elementary or middle/junior high school education (general)	Ⓐ	Ⓑ	Ⓒ	HE001010
b. Elementary science	Ⓐ	Ⓑ	Ⓒ	HE002553
c. Middle/junior high school or secondary science	Ⓐ	Ⓑ	Ⓒ	HE002554
d. Other	Ⓐ	Ⓑ	Ⓒ	HE002555

HE001012

6. What is the highest academic degree you hold?

Ⓐ High school diploma

Ⓑ Associate's degree/vocational certification

Ⓒ Bachelor's degree

Ⓓ Master's degree

Ⓔ Education specialist's or professional diploma based on at least one year's work past master's degree

Ⓕ Doctorate

Ⓖ Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)

HE001013

7. What were your undergraduate major fields of study? Fill in **all** ovals that apply.

a. Education	Ⓐ	HE002556
b. Elementary education	Ⓐ	HE002557
c. Secondary education	Ⓐ	HE002558
d. Science education	Ⓐ	HE002561
e. Life science	Ⓐ	HE002562
f. Physical science	Ⓐ	HE002563
g. Earth science	Ⓐ	HE002564
h. Special education	Ⓐ	HE002565
i. Bilingual education or ESL	Ⓐ	HE002566
j. Other	Ⓐ	HE002567

HE001014

8. What were your graduate major fields of study? Fill in **all** ovals that apply.

a. Education	Ⓐ	HE002568
b. Elementary education	Ⓐ	HE002569
c. Secondary education	Ⓐ	HE002570
d. Special education	Ⓐ	HE002573
e. Life science	Ⓐ	HE002574
f. Physical science	Ⓐ	HE002575
g. Earth science	Ⓐ	HE002576
h. Special education	Ⓐ	HE002577
i. Bilingual education	Ⓐ	HE002578
j. Administration and supervision	Ⓐ	HE002579
k. Curriculum and instruction	Ⓐ	HE002580
l. Counseling	Ⓐ	LD001506
m. Other	Ⓐ	HE002581
n. No graduate-level study	Ⓐ	HE002582

HE002583

9. What were your undergraduate and graduate minor fields of study? Fill in **all** ovals that apply.

a. Education	Ⓐ	HE002584
b. Elementary education	Ⓐ	HE002585
c. Secondary education	Ⓐ	HE002586
d. Science education	Ⓐ	HE002589
e. Life science	Ⓐ	HE002590
f. Physical science	Ⓐ	HE002591
g. Earth science	Ⓐ	HE002592
h. Special education	Ⓐ	HE002593
i. Bilingual education	Ⓐ	HE002594
j. Administration and supervision	Ⓐ	HE002595
k. Curriculum and instruction	Ⓐ	HE002596
l. Counseling	Ⓐ	LD001509
m. Other	Ⓐ	HE002597
n. No minor field of study	Ⓐ	HE002598

HE002600

10. During the last year, how much time in total have you spent in professional development workshops or seminars in science or science education? Include attendance at professional meetings and conferences, district-sponsored workshops, and external workshops.

Ⓐ None

Ⓑ Less than 6 hours

Ⓒ 6-15 hours

Ⓓ 16-35

Ⓔ More than 35 hours

HE002602

11. During the last two years, how many college or university courses have you taken in science or science education?

Ⓐ None

Ⓑ One

Ⓒ Two

Ⓓ Three

Ⓔ Four or more

HE001022

12. Which of the following statements is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?

Ⓐ I get all the resources I need.

Ⓑ I get most of the resources I need.

Ⓒ I get some of the resources I need.

Ⓓ I don't get any of the resources I need.

HE002618

13. Is there a curriculum specialist available to help or advise you in science?

Ⓐ Yes

Ⓑ No

QK070702

14. During the past 12 months, how often have you used the services of a curriculum specialist to help/advise you in science?

Ⓐ Often

Ⓑ Occasionally

Ⓒ Never

Ⓓ There is no curriculum specialist available.

HE001251

15. How many school hours do you have designated as preparation time per week?

Ⓐ None

Ⓑ Less than 1

Ⓒ 1-2

Ⓓ 3-4

Ⓔ 5

Ⓕ More than 5

PJ000361

16. Over the past 12 months, **approximately** how much of your own money have you spent on materials and equipment for instruction in your science classes?

Ⓐ None

Ⓑ $1-$25

Ⓒ $26-$50

Ⓓ $51-$100

Ⓔ $101-$150

Ⓕ $151-$250

Ⓖ More than $250

Part II-A: Science Preparation

There are 2 questions in this section.

QK070721

1. During the past two years, have you taken college or university courses or participated in professional development activities in any of the following? Fill in **all** ovals that apply.

	College or University Course(s)	Workshops Lasting More than 1 Day	Workshops Lasting 1 Day or Less	None	
a. Methods of teaching science	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070722
b. Biology/life science	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070723
c. Chemistry	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070724
d. Physics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070725
e. Earth science	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070726
f. Other types of science courses	Ⓐ	Ⓑ	Ⓒ	Ⓓ	QK070727

WO001025

2. During the past five years, have you taken courses or participated in professional development activities in any of the following areas? Fill in **all** ovals that apply.

a. Use of computers for data acquisition (probeware, scientific instrumentation)	Ⓐ	WO001026
b. Use of computers for data analysis (databases, spreadsheets, graphing software)	Ⓐ	WO001027
c. Laboratory management or safety	Ⓐ	WO001029
d. Integrated science instruction (integrating strands of life, physical, and earth sciences)	Ⓐ	WO001030

Part II-B: Science Instructional Information

There are 16 questions in this section.

Questions 1 through 9. These questions refer to your science instruction in general.

HE002414

1. About how often do your science students do each of the following?
   Fill in **one** oval on each line.

	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever	
a. Read a science textbook	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002415
b. Read a book or magazine about science	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002416
c. Discuss science in the news	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002417
d. Work with other students on a science activity or project	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002418
e. Give an oral science report	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002419
f. Prepare a written science report	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002420
g. Do hands-on activities or investigations in science	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002421
h. Talk about measurements and results from students' hands-on activities	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002422
i. Take a science test or quiz	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002423

HE002426

2. When you teach science, about how often do you do each of the following?
   Fill in **one** oval on each line.

	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever	
a. Do a science demonstration	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002428
b. Show a science videotape or science television program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002429
c. Use computers for science (e.g., science software, telecommunications)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	HE002432
d. Read to students from the science textbook	Ⓐ	Ⓑ	Ⓒ	Ⓓ	ID110404

HE002431

3. About how often do your science students go on a science field trip?

   Ⓐ 3 or more times a year

   Ⓑ 1 or 2 times a year

   Ⓒ Never or hardly ever

HE002435

4. Think about your plans for your science instruction during the entire year. About how much emphasis will you give to each of the following objectives for your students? Fill in **one** oval on each line.

	Heavy Emphasis	**Moderate Emphasis**	**Little or No Emphasis**	
a. Knowing science facts and terminology	Ⓐ	Ⓑ	Ⓒ	HE002436
b. Understanding key science concepts	Ⓐ	Ⓑ	Ⓒ	HE002437
c. Developing science problem-solving skills	Ⓐ	Ⓑ	Ⓒ	HE002438
d. Learning about the relevance of science to society and technology	Ⓐ	Ⓑ	Ⓒ	HE002439
e. Knowing how to communicate ideas in science effectively	Ⓐ	Ⓑ	Ⓒ	HE002440
f. Developing laboratory skills and techniques	Ⓐ	Ⓑ	Ⓒ	HE002441
g. Developing students' interest in science	Ⓐ	Ⓑ	Ⓒ	HE002442
h. Developing data analysis skills	Ⓐ	Ⓑ	Ⓒ	HE002443
i. Using technology as a scientific tool	Ⓐ	Ⓑ	Ⓒ	HE002444

HE002445

5. Do you ever assign individual or group science projects or investigations in school that take a week or more?

   Ⓐ Yes

   Ⓑ No

HE002446

6. How often do you use each of the following to assess student progress in science? Fill in **one** oval on each line.

	Once or Twice a Week	Once or Twice a Month	Once per Grading Period	Once or Twice a Year	Never or Hardly Ever
a. Multiple-choice tests	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ HE002447
b. Short or long written responses (e.g., a phrase or sentence; or several sentences or paragraphs)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ HE002448
c. Laboratory notebooks or journals	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ HE002454

HE002457

7. What proportion of a student's evaluation in science (final grade) is based on performance with hands-on activities?

Ⓐ Most or all of the grade

Ⓑ About half of the grade

Ⓒ Very little of the grade

Ⓓ None of the grade

HE002458

8. Which best describes the availability of computers for use by your science students?

Ⓐ None available

Ⓑ One within the classroom

Ⓒ Two or three within the classroom

Ⓓ Four or more within the classroom

Ⓔ Available in a computer laboratory but difficult to access or schedule

Ⓕ Available in a computer laboratory and easy to access or schedule

9. How do you use computers for instruction in science?

   Ⓐ Drill and practice

   Ⓑ Playing science/learning games

   Ⓒ Simulations and modeling

   Ⓓ Data analysis and other applications

   Ⓔ Word processing

   Ⓕ I do not use computers for science instruction.

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Questions 10 through 15. Please answer these questions about each of the science classes listed on the front cover. One column is provided for each class. However, if your responses to all of these questions are the same for more than one class, record your answers for these classes in one column and grid the class period numbers for which your responses apply at the top of the column. If you teach one class of students all day, this should be called class period "1" on the front cover and throughout this section.

Fill in **one** oval in each column for each question then complete **Question 16** as directed.

For which class period(s) do **all** of the following responses apply? →	**COLUMN 1** ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨	**COLUMN 2** ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
HE002412		
10. Are students assigned to this class by ability?	10.	10.
A Yes	Ⓐ	Ⓐ
B No	Ⓑ	Ⓑ
HE002461		
11. If students are assigned by ability, which of the following best describes the science ability level of the students in this class?	11.	11.
A Students are not assigned by ability.	Ⓐ	Ⓐ
B Primarily high ability	Ⓑ	Ⓑ
C Primarily average ability	Ⓒ	Ⓒ
D Primarily low ability	Ⓓ	Ⓓ
E Widely mixed ability	Ⓔ	Ⓔ
HE002463		
12. In this class, about how much time do you spend on each of the following areas of science? Fill in **one** oval on each line.	12.	12.
	A lot **Some** **Little** **None**	**A lot** **Some** **Little** **None**
A Life science	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ
B Earth science	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ
C Physical science	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ

COLUMN 3	COLUMN 4	COLUMN 5
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
10.	10.	10.
Ⓐ	Ⓐ	Ⓐ
Ⓑ	Ⓑ	Ⓑ
11.	11.	11.
Ⓐ	Ⓐ	Ⓐ
Ⓑ	Ⓑ	Ⓑ
Ⓒ	Ⓒ	Ⓒ
Ⓓ	Ⓓ	Ⓓ
Ⓔ	Ⓔ	Ⓔ
12.	12.	12.
A lot Some Little None	A lot Some Little None	A lot Some Little None
Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ
Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ
Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ

	COLUMN 1	COLUMN 2
HE002464 13. Which of the following best describes the space where this class is taught?	13.	13.
A A classroom with no access to a laboratory or a water source	Ⓐ	Ⓐ
B A classroom with access to a water source only	Ⓑ	Ⓑ
C A classroom with access to a laboratory only	Ⓒ	Ⓒ
D A laboratory with water source	Ⓓ	Ⓓ
HE002465 14. As part of their work for this science class, do students produce any of the following records of their work? Fill in **all** ovals that apply.	14.	14.
HE002466 a. Notebooks or reports of laboratory work	a. Ⓐ	a. Ⓐ
HE002467 b. Reports or other written records of extended science projects	b. Ⓐ	b. Ⓐ
HE002468 c. Written reports on specific topics or issues in science	c. Ⓐ	c. Ⓐ
HE002470 d. Journals, diaries, or logs of ideas about science or work done for science class	d. Ⓐ	d. Ⓐ
HE002475 e. Computer-generated multimedia science projects	e. Ⓐ	e. Ⓐ

COLUMN 3	COLUMN 4	COLUMN 5
13.	13.	13.
Ⓐ	Ⓐ	Ⓐ
Ⓑ	Ⓑ	Ⓑ
Ⓒ	Ⓒ	Ⓒ
Ⓓ	Ⓓ	Ⓓ
14.	14.	14.
a. Ⓐ	a. Ⓐ	a. Ⓐ
b. Ⓐ	b. Ⓐ	b. Ⓐ
c. Ⓐ	c. Ⓐ	c. Ⓐ
d. Ⓐ	d. Ⓐ	d. Ⓐ
e. Ⓐ	e. Ⓐ	e. Ⓐ

	COLUMN 1	COLUMN 2
HE002476 15. About how much time do you expect a student in this class to spend doing science homework **each week**? **A** None **B** 1/2 hour **C** 1 hour **D** 2 hours **E** More than 2 hours	15. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ	15 Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

COLUMN 3	COLUMN 4	COLUMN 5
15.	15.	15.
Ⓐ	Ⓐ	Ⓐ
Ⓑ	Ⓑ	Ⓑ
Ⓒ	Ⓒ	Ⓒ
Ⓓ	Ⓓ	Ⓓ
Ⓔ	Ⓔ	Ⓔ

QK070731

16. For each of the science class periods indicated on the front cover, please fill in the oval for the class period and, using the boxes provided, print the number of students in that class.

    Please print legibly with a No. 2 pencil. Numbers should be written clearly in the center of the boxes and should not touch the sides. Using one number per box, fill in every box. For example, 9 students would be written as:

    

    Class period ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Number of students: ☐☐

    Class period ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Number of students: ☐☐

    Class period ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Number of students: ☐☐

    Class period ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Number of students: ☐☐

    Class period ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ Number of students: ☐☐