APPENDIX B

Sample NAEP 1994 Geography Questions

The following appendix presents a sample cognitive section for each of the three grades assessed in the NAEP 1994 geography assessment. The sections contain a mixture of multiple-choice and constructed-response questions. The questions comprising the sample sections represent broad coverage of the three content areas that define the NAEP geography assessment.

The three cognitive sections that were selected for inclusion in this report are intended to give the reader a sense of the geography assessment. Given the breadth and depth of the content covered, no sampling of questions can adequately represent all the skills and content areas measured in the full assessment. The *NAEP Geography Framework* better describes the characteristics of the assessment as whole.

For each of the multiple-choice questions contained in Appendix B, the correct response is indicated. Also, the percentage of students who correctly answered the question is provided. For each of the constructed-response questions, a summary of the scoring guide accompanies the question.

Accompanying the questions are tables that present two types of percentages: (1) the overall percentage of students within a grade who successfully answered the question, and (2) the percentages of students within each of the achievement level intervals — *Basic, Proficient,* and *Advanced* — who successfully answered the question. For the questions in the grade 4 and 12 blocks, the percentages for students within the *Advanced* achievement level interval are not presented, however, because of small sample sizes. The percentages of students below *Basic* who successfully answered the questions are not included in the tables. However, these students are included in the overall percentages.

   Please note that the format and size of some questions has been revised from the original student booklets to facilitate presentation in this report.

GRADE 4

The following block of 15 questions was administered at grade 4. Students were given 25 minutes to complete the block.
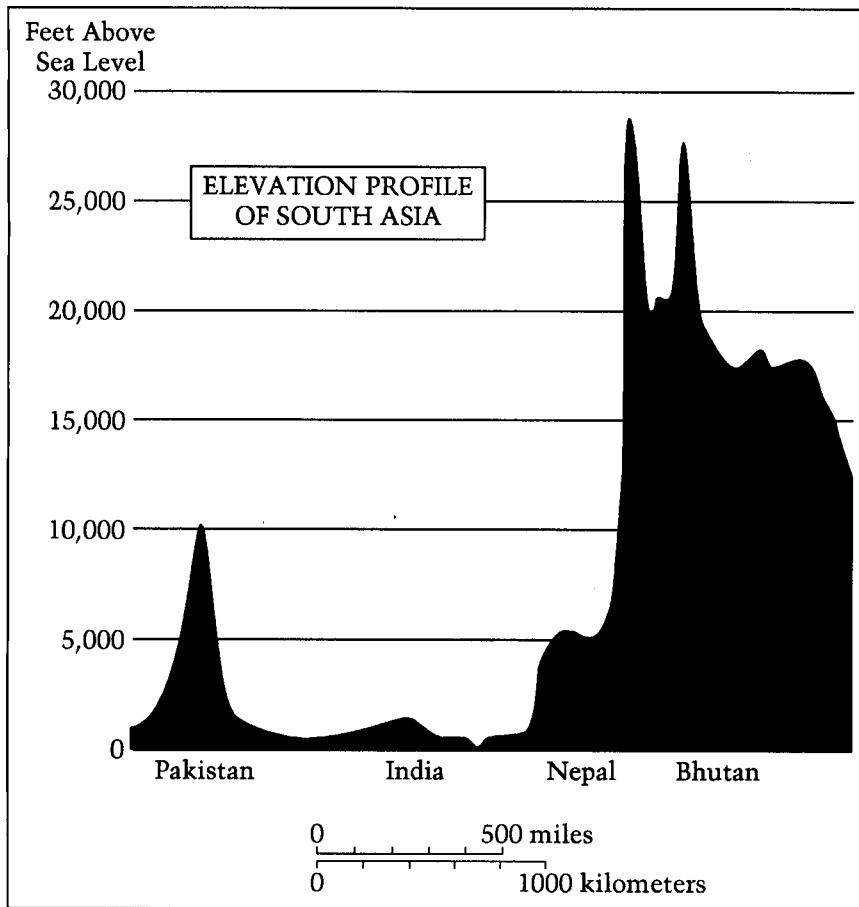
The format of the questions was revised slightly to facilitate presentation in this report. For the multiple-choice questions, the correct answer is indicated (▶). For constructed-response questions, an abbreviated version of the scoring rubric is presented after the question.

The table following each question presents two types of percentages: (1) the overall percentage of fourth-graders who successfully answered the question, and (2) the percentages of students within each of the achievement level intervals — *Basic, Proficient,* and *Advanced* — who successfully answered the question. The percentages for students within the *Advanced* achievement level interval are not presented, however, because of small sample sizes.

1. **Tom is able to wear lightweight clothing all year round. He probably lives near the**

   A Arctic Circle

   B British Isles

   C South Pole

   ▶D Equator

Grade 4 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 187-239*	*Proficient* 240-275*	*Advanced* 277 and above*
67 (1.3)	75 (1.8)	94 (1.9)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

```
Feet Above
 Sea Level
   30,000 ─────────────────────────────────────────────

                ┌─────────────────────┐
   25,000 ──────│ ELEVATION PROFILE   │─────────────────
                │    OF SOUTH ASIA    │
                └─────────────────────┘
   20,000 ─────────────────────────────────────────────

   15,000 ─────────────────────────────────────────────

   10,000 ─────────────────────────────────────────────

    5,000 ─────────────────────────────────────────────

        0
           Pakistan        India        Nepal    Bhutan

                 0                500 miles
                 └──┴──┴──┴──┴──┘
                 0              1000 kilometers
```

2. **Look at the elevation profile of South Asia. Which country has the lowest average elevation?**

    A Pakistan

▶B India

    C Nepal

    D Bhutan

Grade 4	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
81 (1.2)	85 (1.5)	94 (2.3)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

3. **Many people migrate from one country to another. What is an important reason why many of these people want to leave their countries?**

_____
_____
_____
_____

      What is an important reason why people might choose to move to the United States?
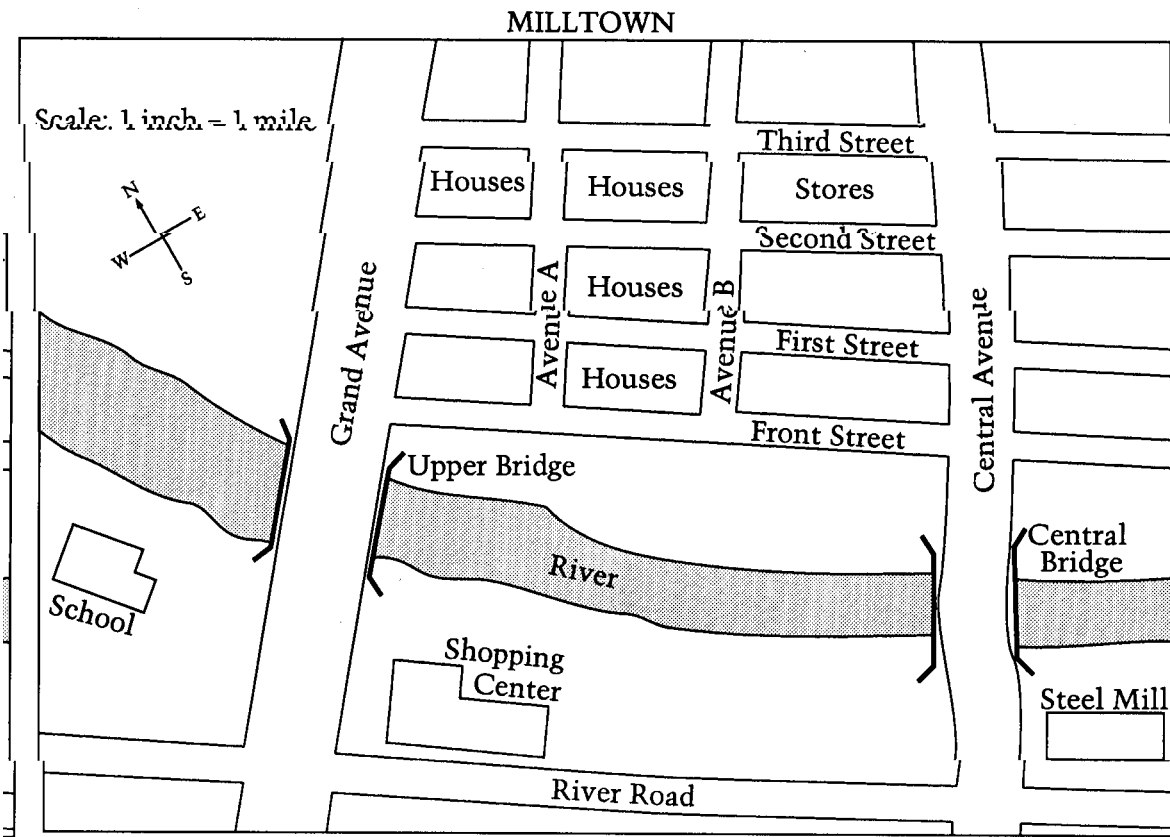
_____
_____
_____
_____

A **Complete** response correctly identifies a reason for migration and a reason for choosing to move to the United States.

A **Partial** response identifies either a reason for migration or a reason for choosing to move to the United States.

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	*Basic* 187-239*	*Proficient* 240-275*	*Advanced* 276 and above*
14 (1.1)	**13 (1.7)**	**29 (2.7)**	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

MILLTOWN

Scale: 1 inch = 1 mile

N
E
W
S

Third Street

Houses   Houses   Stores

Second Street

Grand Avenue

Avenue A

Houses

Avenue B

First Street

Houses

Central Avenue

Front Street

Upper Bridge

River

Central
Bridge

School

Shopping
Center

Steel Mill

River Road

4. **If Central Bridge is closed for repairs, what will happen in Milltown?**

    A Traffic will move faster.

▶B Upper Bridge will have more traffic.

    C Central Avenue will have more traffic.

    D The shopping center will close down.

Grade 4	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	*Basic* 187-239*	*Proficient* 240-275*	*Advanced* 276 and above*
57 (1.3)	58 (1.9)	86 (2.1)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

5. **If Central Bridge is closed for repairs, what will probably happen to the steel mill workers who live on Avenue B?**

►A They will have to drive farther to work.

B They will lose their jobs because the mill will close.

C They will get to work faster.

D They will have to move south of the river.

Grade 4 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
63 (1.1)	67 (2.3)	89 (2.3)	**

* NAEP geography composite scale range. ** Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 6-7 refer to the following chart.

MAJOR EXPORTS OF THREE COUNTRIES

Country A	Country B	Country C
Oil Natural Gas Coconuts	Cars Televisions Cameras	Computers Airplanes Wheat

6. **The situation shown in the chart will probably lead to**

►A trade among all three countries

B trade only between countries A and B

C trade only between countries B and C

D a decision by each country to produce all nine goods listed

Grade 4 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
37 (1.6)	35 (2.7)	62 (3.8)	**

* NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

7. **Is the United States most likely country A, B, or C?**

    Give one reason why.

    _____
    _____
    _____
    _____

A **Complete** response correctly identifies country C and gives one appropriate reason why.

A **Partial** response correctly identifies C but gives either no reason why, or an inappropriate reason for the choice.

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
9 (0.8)	6 (1.2)	23 (3.3)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 8-10 are based on the picture below.

The Image Bank

8. **What type of land use does the picture show?**

   A Recreational

   B Farming

   ►C Industrial

   D Mining

Grade 4	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
52 (1.3)	54 (2.1)	71 (3.0)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

9. **Explain how the activity shown in the picture might harm the people who live in the area.**

_____
_____
_____
_____

Complete   a. Pollution must be obvious or strongly implied and tied to some specific health problem (i.e., damaged lungs, difficult to breathe, death)

or   b. a specific health problem such as those listed above without linking it to pollution

or   c. safety issue (e.g., explosive, flammable, evacuated)

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
33 (1.6)	35 (2.6)	41 (4.0)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

10. **Explain how the activity shown in the picture might help people who live in the area.**

_____
_____
_____
_____

A **Complete** response identifies one benefit of this activity.

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
32 (1.4)	35 (2.1)	43 (4.1)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

WAYS TO GET RID OF WASTE

- Dumping far out in the ocean
- Burning
- Recycling
- Burying in landfills

11. From the list above, select one method of getting rid of waste and identify one advantage and one disadvantage of this method.

Method of waste disposal: _____
_____
_____

Advantage: _____
_____
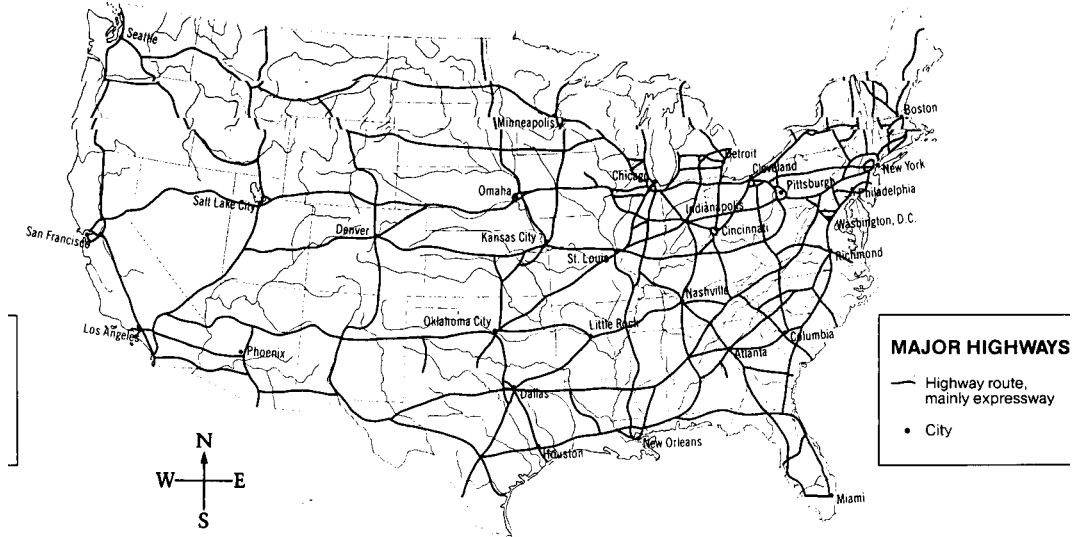_____

Disadvantage:_____
_____
_____

A **Complete** response accurately describes an advantage and disadvantage of one method of waste disposal. Explanations should be both specific to that method and geographically logical.

A **Partial** response describes either an advantage <u>or</u> a disadvantage. If present, the other description is incorrect or trivial, as in, "dumping waste in oceans has no effect on us," or "it takes a long time to dump waste in oceans".

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	*Basic* 187-239*	*Proficient* 240-275*	*Advanced* 276 and above*
11 (0.9)	**8 (1.3)**	**28 (3.2)**	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 12-13 are based on the highway map below.

12. **The map shows that one part of the country has more major highways than the other part of the country. Why is this?**

   ►A There are more people and cities in the eastern part of the country.

   B It is easier to build highways in the eastern part of the country.

   C Cars are not an important form of transportation in the western part of the country.

   D States are larger in the western part of the country.

Grade 4	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
59 (1.5)	62 (1.9)	77 (3.0)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

13. **To drive from Los Angeles to Salt Lake City in the most direct way, one would travel**

   A southeast

   B southwest

   ►C northeast

   D northwest

Grade 4	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
61 (1.3)	63 (2.0)	84 (2.7)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

14. **Describe two important effects that a major oil spill in an ocean can have on the environment or on people's lives.**

   _____
   _____
   _____
   _____

A **Complete** response describes two effects of an oil spill in a distant place. Effects described may be environmental (for example, pollutes beaches, pollutes air, kills living organisms), economic (for example, ruins fishing industry, ruins tourist industry), or political (for example, causes disputes over who is responsible for cleanup).

A **Partial** response mentions that an oil spill affects the environment or the economy, or has some other effect, but does not explain how.

Grade 4	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
13 (1.0)	12 (1.7)	28 (3.3)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

15. **Many children all over the world know what rock-and-roll music is. What has made this possible?**

    A Most children study foreign languages in school.

    B Books about rock and roll are now available to all students.

    C Most schools now teach students about different kinds of music.

▶D Communications systems like television and radio have helped the music spread.

Grade 4 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 187-239*	Proficient 240-275*	Advanced 276 and above*
70 (1.2)	77 (1.8)	92 (1.9)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

GRADE 8

The following block of 16 questions was an overlap block administered at grades 8 and 12. Students were given 25 minutes to complete the block.

The format of the questions was revised slightly to facilitate presentation in this report. For the multiple-choice questions, the correct answer is indicated (▶). For constructed-response questions, an abbreviated version of the scoring rubric is presented after the question.

The tables following each question present two types of percentages: (1) the overall percentage of eighth-graders who successfully answered the question, and (2) the percentages of students within each of the achievement level intervals — *Basic*, *Proficient*, and *Advanced* — who successfully answered the question.

1. **Of the following, which group would most likely be located on level land?**

   A Hydroelectric plant, national park, reservoir

   B Orchard, coffee plantation, mine

   C Amusement park, ski resort, quarry

   ▶D Railroad, city, airport

Grade 8 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 242-281*	*Proficient* 282-314*	*Advanced* 315 and above*
75 (0.9)	77 (2.0)	91 (1.5)	92 (4.0)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.
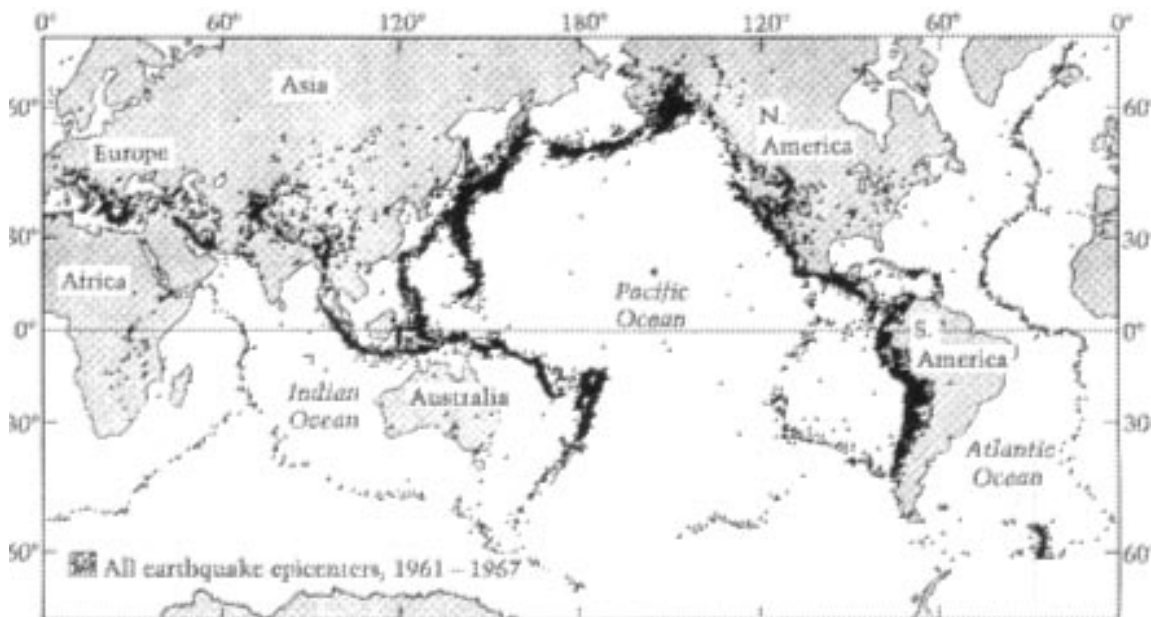
2. **The land shown in the photograph has been altered mainly to**

   A increase the beauty of the landscape

▶B increase the availability of land that can be used for farming

   C demarcate land belonging to different people

   D enable residents to climb the slopes more easily

Grade 8 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
60 (1.5)	57 (2.7)	75 (2.8)	92 (3.7)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 3-4 are based on the map below showing the distribution of earthquake epicenters around the world between 1961 and 1967.

3. **Between 1961 and 1967, the area that had the most earthquakes was the**

    A Mediterranean basin

    B mid-Atlantic Ocean

    C Caribbean Sea

    ▶D Pacific Ocean rim

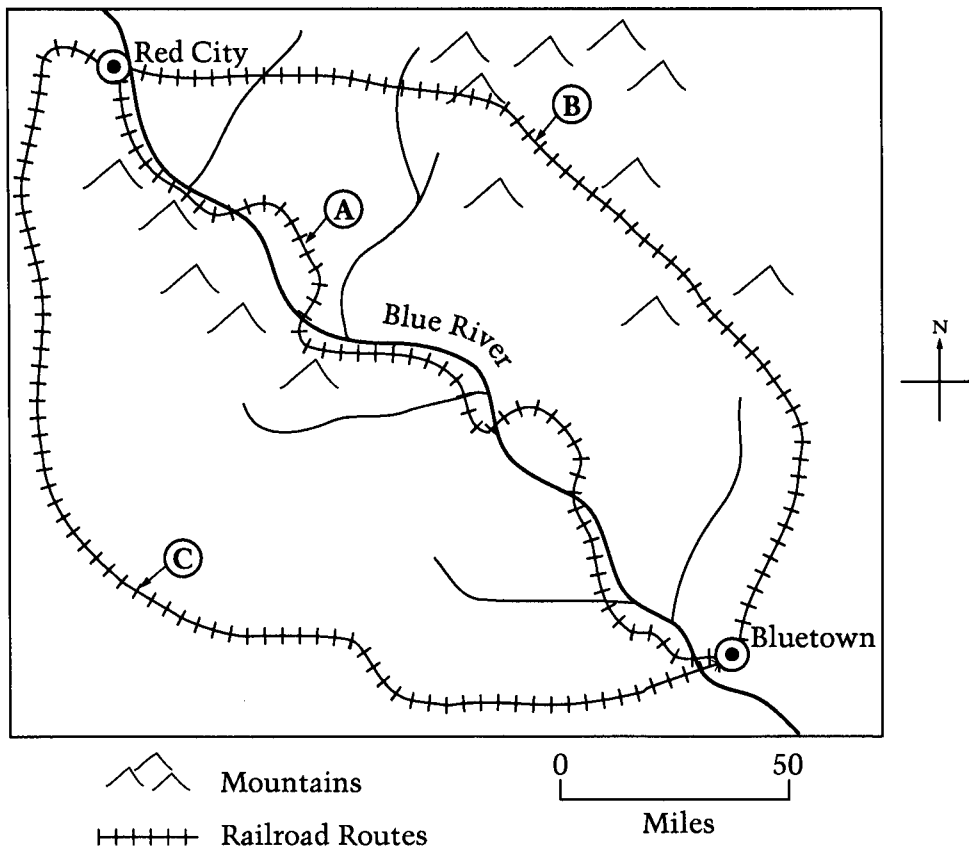| Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
84 (0.7)	90 (1.8)	96 (1.6)	98 (1.5)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

4. **What is responsible for the pattern of earthquake activity shown on the map?**

    A Volcanic eruptions

    B The weight of ocean water pressing on the land

    C Hurricanes and cyclones

▶D The movement of tectonic plates

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
69 (1.4)	74 (2.7)	92 (1.4)	99 (3.5)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Question 5 is based on the map below.

Mountains

Railroad Routes

Red City

Blue River

Bluetown

B

A

C

N

0   50

Miles

5. Look at the map on the preceding page, which shows three possible routes for a railroad line that will be built to connect Red City with Bluetown.

    Which route would be the least expensive to construct?

    _____

    Give two reasons why the route you chose would be the least expensive.

    1 _____

    2 _____

A **Complete** response indicates that C is the least expensive route to construct. It gives two reasons why that may relate to A and B.

A **Partial** response indicates that C is the least expensive route to construct and gives one reason.

Grade 8 Overall Percentage Complete	Percentage "Complete" within Achievement Level Intervals		
	Basic 242-281*	*Proficient* 282-314*	*Advanced* 315 and above*
36 (1.5)	36 (2.3)	62 (3.3)	80 (7.9)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

6. **People from many different countries live in New York City. Children speaking many different languages attend its public schools. This is mainly because New York City**

    A has an efficient transportation system

    B has a higher wage rate than other United States cities

▶C is a port of entry for people from other parts of the world

    D is the site of the United Nations headquarters

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
70 (1.4)	74 (2.9)	87 (3.2)	99 (1.4)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

7. **In the mid-nineteenth century, before railroads were constructed, people in the United States transported commercial materials, such as timber and coal, over long distances primarily by means of**

▶A rivers and canals

    B turnpikes and freeways

    C pack horses and mule trains

    D ox carts and Conestoga wagons

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
56 (1.8)	58 (2.6)	67 (3.5)	75 (7.7)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.
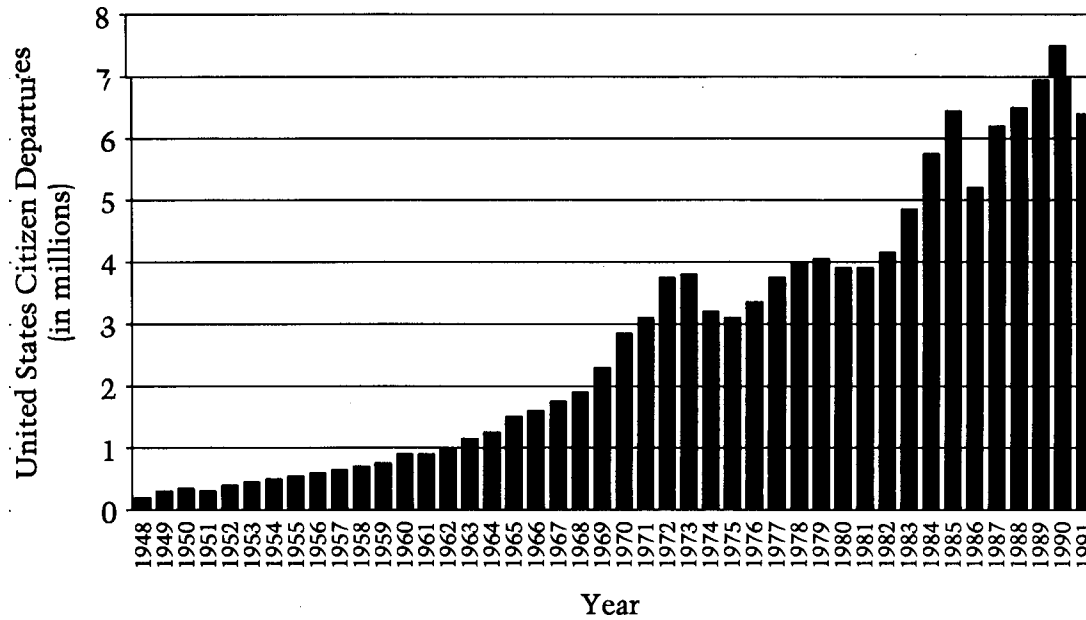
8. **The major areas of wheat production in the world are the central United States and Canada, Ukraine, south central Australia, and the pampas of Argentina. What is the characteristic shared by these areas that explains their role in wheat production?**

   A All have rainy, damp climates.

   B All are near sea coasts.

   ►C All are plains.

   D All are in highland regions.

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
52 (1.5)	48 (2.9)	81 (2.9)	95 (3.4)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

TRAVEL TO EUROPE, 1948-1991

9. What is the dominant trend shown in the graph?

_____

_____

_____

Give two major reasons for the trend shown.

_____

_____

_____

A **Complete** response identifies the major trend in the graph and provides two appropriate reasons to explain this.

A **Partial** response identifies the major trend in the graph but gives either no reason, or only one reason to explain this. Or, the response provides two appropriate reasons, but fails to identify the trend.

Grade 8	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
9 (0.8)	3 (1.0)	22 (2.3)	49 (10.7)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

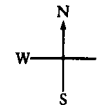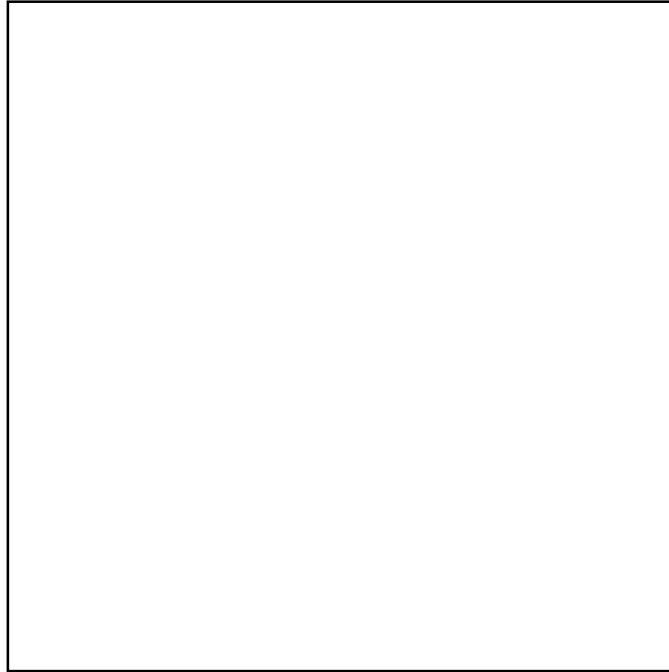**10. Fossil fuels such as oil and coal are formed from**

▶A geological processes that transform organic materials

B the rapid decay of animal bones

C organic processes that lead to the fossilization of animal tissue

D artificial processes used to treat and reuse garbage

Grade 8 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
45 (1.3)	44 (2.4)	60 (3.2)	79 (7.8)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

11. After we anchored our ships in the ocean and went ashore to explore, we marched west. The forest was so thick we could only travel three miles in the first two days. Then we came to the mountains and climbed to the top. A rushing river flowed west out of the mountains. We continued to march two miles west and came down out of the mountains. Two miles further we came to the coast. It was obvious that the area we were exploring was an isthmus.

In the box below, draw a map of the region described above. Be sure to include all of the geographical elements mentioned in the description. Include a scale to indicate distances.

A **Complete** response includes an accurate map in which at least four elements are correctly placed. The response must be an isthmus and have direction of travel and river correctly indicated.

An **Essential** response includes a map in which three elements are correctly placed. The response may be a peninsula or an island.

A **Partial** response includes a map in which at least two elements are correctly placed.

Grade 8	Percentage "Essential" or Better within Achievement Level Intervals		
Overall Percentage Essential or Better	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
41 (1.3)	39 (2.4)	78 (3.4)	92 (4.8)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

12. An example of diffusion is that crops that were once grown mostly in North and South America are

▶A now grown all over the world

B now grown only in areas where productivity is high

C now grown only in the Northern Hemisphere

D no longer grown there

Grade 8 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
51 (1.3)	51 (2.3)	55 (2.6)	69 (9.0)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Bas/Rothco

13. **Environmental issues are viewed differently by people in different circumstances. Explain how the artist makes this point in the cartoon.**

_____
_____
_____
_____

A **Complete** response discusses environmental issue, tension (implied or stated between the 2 worlds), hypocrisy (not absolutely necessary if tension is clearly discussed), and two different viewpoints (developed vs developing). The discussion must be at the national level.

An **Essential** response mentions two different views (developed vs developing) and refers to trees and car pollution. An appreciation of tension may or may not be present. Or, the response implies or states the hypocrisy that exists and talks about the tree or the car.

A **Partial** response mentions that the cartoon discusses environmental issues or gives one viewpoint.

Grade 8	Percentage "Essential" or Better within Achievement Level Intervals		
Overall Percentage Essential or Better	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
24 (1.2)	21 (2.3)	46 (3.6)	71 (9.1)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

14. **In the United States, most of the fertile soils of the Midwest were derived from**

▶A glaciers

B volcanic activity

C decaying organic matter

D eroded sandstone

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
21 (1.2)	19 (2.4)	25 (3.3)	47 (11.2)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

15. **Under which of the following circumstances would you be most likely to find snow in equatorial regions?**

A In areas below sea level

B In areas at high latitudes
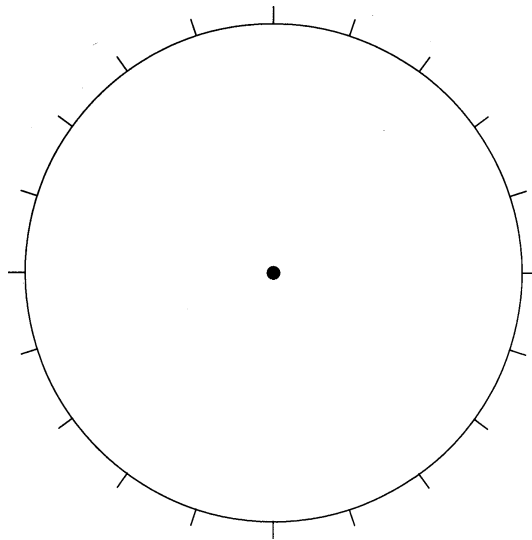
▶C In areas at high elevations

D In winter

Grade 8	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
51 (1.3)	52 (2.1)	75 (2.6)	89 (4.9)

*NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

AVERAGE ANNUAL PRECIPITATION FOR LAKESIDE

Season	Average Inches	Percent of Total
Spring	5.0	25
Summer	7.0	35
Fall	4.0	20
Winter	4.0	20
Total	20.0	100

16. Use the information in the table above to construct a pie chart on the figure below. Be sure to label all information. You may use your ruler to draw the chart.

A **Complete** response correctly charts the percentage of rainfall of the four seasons on the circle and correctly labels the segments (the minimum correct labels are the four seasons).

A **Partial** response correctly charts the percentage of rainfall of one to three seasons or divides the chart up correctly but does not label by season or labels by inches only.

Grade 8	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 242-281*	Proficient 282-314*	Advanced 315 and above*
45 (1.5)	42 (2.7)	72 (3.3)	87 (7.3)

* NAEP geography composite scale range.
The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

The following block of 17 questions was administered at grade 12. Students were given 25 minutes to complete the block.

The format of the questions was revised slightly to facilitate presentation in this report. For the multiple-choice questions, the correct answer is indicated (▶). For constructed-response questions, an abbreviated version of the scoring rubric is presented after the question.
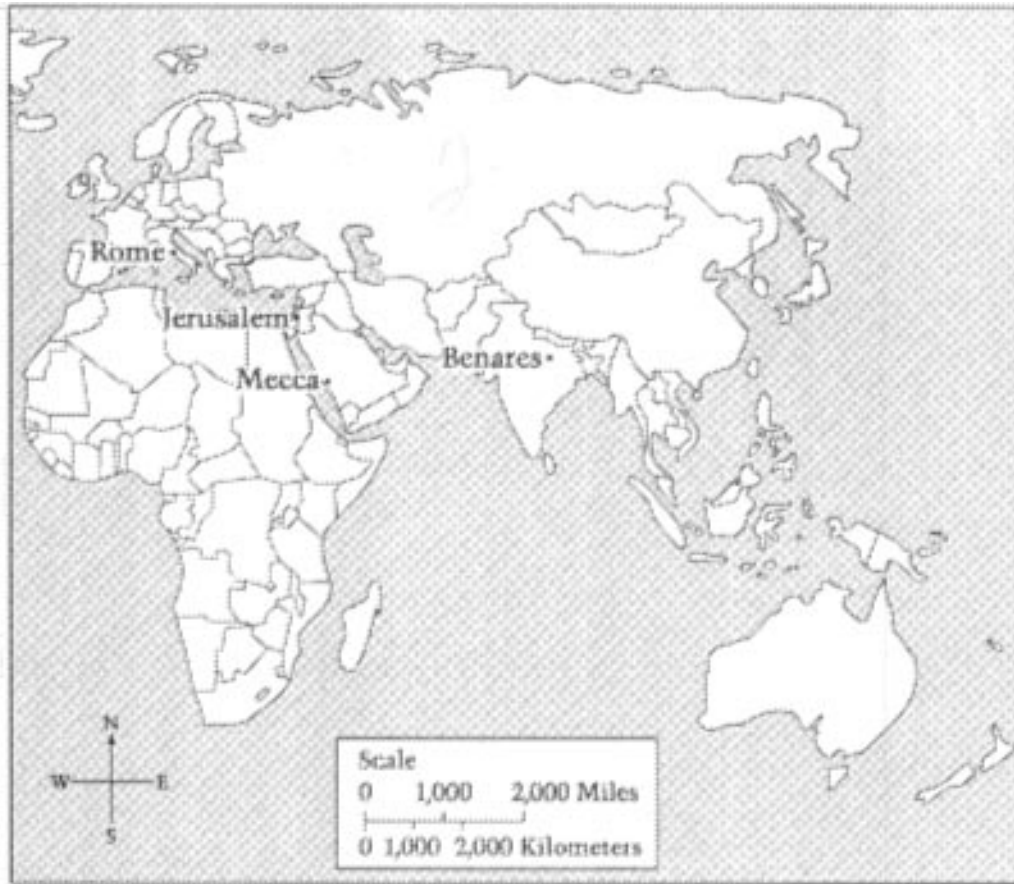
The tables following each question present two types of percentages: (1) the overall percentage of twelfth-graders who successfully answered the question, and (2) tthe percentages of students within each of the achievement level intervals — *Basic*, *Proficient*, and *Advanced* — who successfully answered the question.. For many of the questions, the percentages for students within the *Advanced* achievement level interval are not presented, however, because of small sample sizes.

1. **Which of the following is most likely to be found in the central business district of a city?**

   A Automobile dealerships

   B A steel mill

   ▶C An office tower

   D Single-family homes

Grade 12 Overall Percentage Correct	Percentage Correct within Achievement Level Intervals		
	Basic 270-304*	*Proficient* 305-338*	*Advanced* 339 and above*
78 (1.1)	82 (1.8)	93 (2.6)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

2. **The four locations indicated on the map above are**

    A capitals of highly industrialized nations

    B the world's four most densely populated cities

    C areas of highest elevation

 ▶D religious centers

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
76 (1.2)	79 (2.1)	96 (1.5)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

3. **On the map above, the shaded countries represent the membership of the**

▶A Organization of Petroleum Exporting Countries (OPEC)

B World Health Organization (WHO)

C North Atlantic Treaty Organization (NATO)

D British Commonwealth of Nations

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
65 (1.4)	66 (2.2)	84 (2.1)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Mexico City is an example of runaway urban growth. Every day an estimated average of 1,700 people move there from villages in the countryside. In addition, more than 1,000 babies are born in the city daily. Some geographers think that as many as 50 million people will live there by the year 2000. Thousands of families survive on the equivalent of a few dollars a day, and most members of these families have no prospects for steady jobs or much improvement in the physical quality of their lives. However, regardless of the hardship and the poverty, people continue to pour into Mexico City.

4. Give two reasons why people continue to move to Mexico City despite the difficult living conditions.
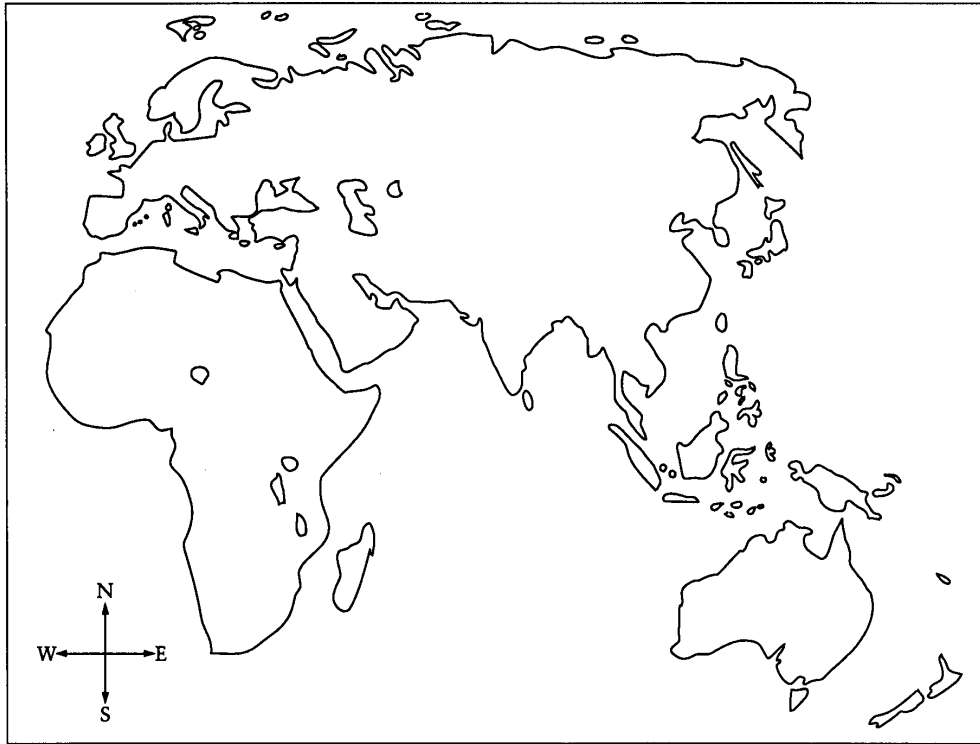
_____

_____

_____

A **Complete** response gives two reasons why people continue to move to Mexico City. The idea must be conveyed that more opportunities not guarantees are available.

A **Partial** response gives one reason that explains why people continue to move to Mexico City.

Grade 12	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	*Basic* 270-304*	*Proficient* 305-338*	*Advanced* 339 and above*
16 (0.9)	12 (1.4)	34 (3.2)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

For Question 5, write your answer on the map below.

5. **Write the number of each of the following physical features in the correct location on the map.**

   1 Pyrenees Mountains

   2 The Japanese Archipelago

   3 Mediterranean Sea

   4 Persian Gulf

A **Complete** response correctly labels all four features on the map.

An **Essential** response correctly labels three features on the map.

A **Partial** response correctly labels one to two features on the map.

Grade 12	Percentage "Essential" or Better within Achievement Level Intervals		
Overall Percentage Essential or Better	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
23 (1.4)	18 (2.0)	50 (3.7)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

> A dense canopy of interlaced broad-leafed trees blocks the sun and shades the forest floor all year in this sparsely populated area. Shallow-rooted trees that rise 150 feet or more have broad trunks with support roots above ground. Rain occurs every day and the forest floor is always damp and dark.

6. **What would the vegetation in this region be called? Name a country where this region might be located.**

   _____
   _____
   _____

A **Complete** response identifies the vegetation as tropical rain forest, and gives a possible location.

A **Partial** response correctly identifies either the vegetation (rainforest) or a location, but not both.

Grade 12	Percentage "Complete" within Achievement Level Intervals		
Overall Percentage Complete	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
36 (1.6)	34 (2.2)	66 (3.6)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 7-8 are based on the following tables.

POPULATION OF STATE X

Year	Total Population	Urban	Rural
1850	92,600	7%	93%
1860	378,000	21%	79%
1870	560,200	37%	63%
1880	864,700	42%	58%
1890	1,213,400	49%	51%
1900	1,485,100	52%	48%
1910	2,377,500	62%	38%
1920	3,426,900	68%	32%
1930	5,677,300	73%	27%
1940	6,907,400	71%	29%
1950	10,586,200	81%	19%
1960	15,717,200	86%	14%
1970	19,953,100	91%	9%
1980	23,668,600	91%	9%

PEOPLE WHO MOVED TO STATE X

Years	Number of People Moving into State
1870 - 1880	129,600
1880 - 1890	214,200
1890 - 1900	172,700
1900 - 1910	694,100
1910 - 1920	804,100
1920 - 1930	1,695,200
1930 - 1940	974,600
1940 - 1950	2,399,100
1950 - 1960	2,788,000
1960 - 1970	1,528,000
1970 - 1980	1,462,000

7. **During which ten-year period did the percentage of people living in urban areas increase the most?**

   ▶A 1860-1870

   B 1890-1900

   C 1930-1940

   D 1960-1970

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
65 (1.3)	67 (2.0)	86 (2.5)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

8. **Which ten-year period showed both a decrease in the number of people moving into State X and an increase in the percentage of people living in rural areas?**

   A 1890-1900

   ▶B 1930-1940

   C 1960-1970

   D 1970-1980

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
60 (1.5)	60 (3.0)	82 (3.1)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.
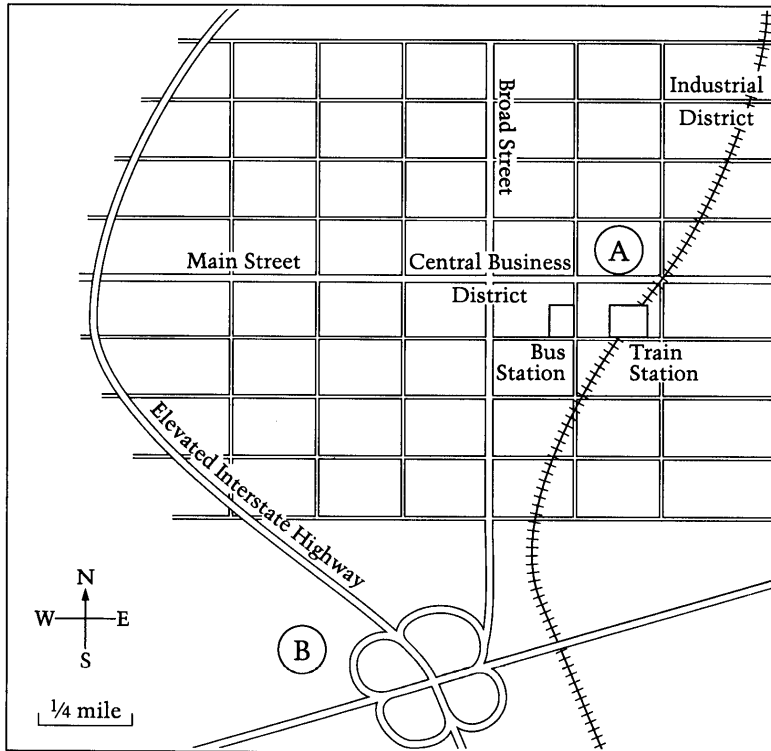
MADDIEVILLE

9. **Maddieville is building a new shopping center. There is a disagreement in the city council over whether to build the shopping center at site A or at site B on the map.**

As a resident of the city who would like to shop at the new shopping center, write a letter to the mayor in support of either site A or site B. Give three reasons why the site you support is better than the other site.

_____

_____

_____

A **Complete** response chooses a site and gives three reasons for the choice.

An **Essential** response chooses a site and supports the choice with two reasons.

A **Partial** response chooses a site and supports the choice with one reason.

Grade 12	Percentage "Essential" or Better within Achievement Level Intervals		
Overall Percentage Essential or Better	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
55 (1.5)	57 (2.7)	76 (2.8)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

10. **Which of the following methods provides the most accurate and effective visual evidence for determining the extent of desertification in a region?**

   A Contour maps

   B Long-range weather forecasts

   ►C Satellite imagery

   D Seismic readings

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
38 (1.3)	39 (2.4)	47 (3.0)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

11. **Which of the following countries has the largest volume and value of trade with the United States?**

   A Japan

   B Great Britain

   ►C Canada

   D Germany

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
10 (1.0)	9 (1.6)	9 (2.3)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

12. **Many people in the Caribbean region are of West African descent. Which of the following is the best explanation for this?**

   A Rapid urbanization

   ▶B The use of slaves in plantation agriculture

   C Religious persecution in the countries of origin

   D Economic opportunity in the Caribbean region

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
47 (1.4)	42 (2.4)	78 (3.6)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

13. **Which of the following has most affected the development of suburbs in the United States in the last 50 years?**

   ▶A Automobiles

   B Computers

   C Electricity

   D High-speed rail transportation

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
53 (1.8)	49 (2.3)	71 (3.4)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Questions 14-16 refer to the table below.

STATISTICAL COMPARISON OF TWO COUNTRIES

	Country A		Country B	
Total Population		7,193,000		123,120,000
Urban-Rural Urban Rural		49.0% 51.0%		76.7% 23.3%
Religious	Roman Catholic Baha'i Other	92.5% 2.6% 4.9%	Shinto* Buddhist* Christian Other	89.5% 76.4% 1.2% 9.3%
Life Expectancy at Birth (years) Male Female		50.9 55.4		75.9 82.1
Age Distribution Under 15 15-29 30-44 45-59 60-74 Over 74		43.4% 26.4% 15.7% 9.3% 4.4% 0.8%		19.0% 21.6% 22.4% 20.1% 9.2% 7.7%
Percent of Population over 25 with No Formal Schooling		48.6%		0.3%
Leading Exports (as percent of total exports):	Natural Gas Tin Zinc Silver Antimony Coffee Sugar Hides	21.0% 12.0% 5.7% 5.6% 4.0% 2.0% 1.5% 1.4%	Motor Vehicles Machinery Iron and Steel Chemicals Textiles Vessels Radios Televisions	18.4% 10.9% 5.8% 5.3% 2.6% 1.5% 0.8% 0.7%
			*Some persons practice both religions	

14. Which of the following statements most accurately describes Country A?

▶A It is dependent on raw material exports.

B It probably has a high literacy rate.

C It has a predominantly urban population.

D It will experience slow population growth.

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	*Basic* 270-304*	*Proficient* 305-338*	*Advanced* 339 and above*
53 (1.4)	52 (2.2)	78 (2.4)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

15. Which of the following statements most accurately describes Country B?

A It has few medical facilities.

▶B It is industrialized.

C Its primary imports are manufactured goods.

D Its population is primarily employed in agriculture.

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	*Basic* 270-304*	*Proficient* 305-338*	*Advanced* 339 and above*
67 (1.4)	68 (2.3)	88 (2.4)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

16. Country B is most likely

    A Botswana

    B India

    C Ireland

▶D Japan

Grade 12	Percentage Correct within Achievement Level Intervals		
Overall Percentage Correct	*Basic* **270-304***	*Proficient* **305-338***	*Advanced* **339 and above***
61 (1.4)	**61 (2.3)**	**80 (2.5)**	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.
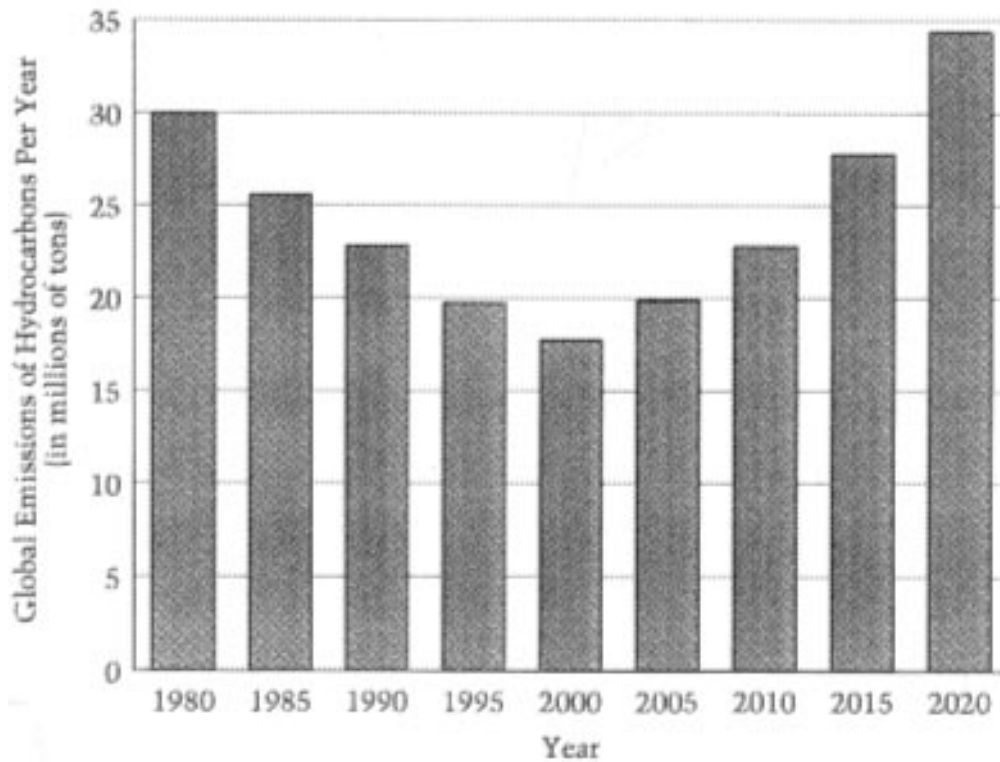
ESTIMATED LEVELS OF HYDROCARBONS IN THE GLOBAL ATMOSPHERE FROM 1980–2020

A bar graph titled "ESTIMATED LEVELS OF HYDROCARBONS IN THE GLOBAL ATMOSPHERE FROM 1980–2020." The vertical axis is labeled "Global Emissions of Hydrocarbons Per Year (in millions of tons)" ranging from 0 to 35. The horizontal axis is labeled "Year" with values 1980, 1985, 1990, 1995, 2000, 2005, 2010, 2015, 2020.

17. The graph shows a prediction made in 1970 of levels of hydrocarbons in the atmosphere. Describe the pattern indicated by the graph.

_____
_____
_____

Explain two factors that could account for the pattern shown.

_____
_____
_____

A **Complete** response identifies the pattern and explains two factors, one linked to a decrease in hydrocarbon emissions and one to an increase in hydrocarbon emissions.

An **Essential** response identifies the pattern and explains one factor that is linked to either a decrease or an increase in hydrocarbon emissions.

A **Partial** response identifies the pattern or explains one factor that is linked to a decrease or an increase in hydrocarbon emissions or explains one or two factors that are not linked.

Grade 12	Percentage "Essential" or Better within Achievement Level Intervals		
Overall Percentage Essential or Better	Basic 270-304*	Proficient 305-338*	Advanced 339 and above*
9 (1.0)	7 (1.5)	19 (2.3)	**

*NAEP geography composite scale range. **Sample size insufficient to permit reliable estimate. The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.