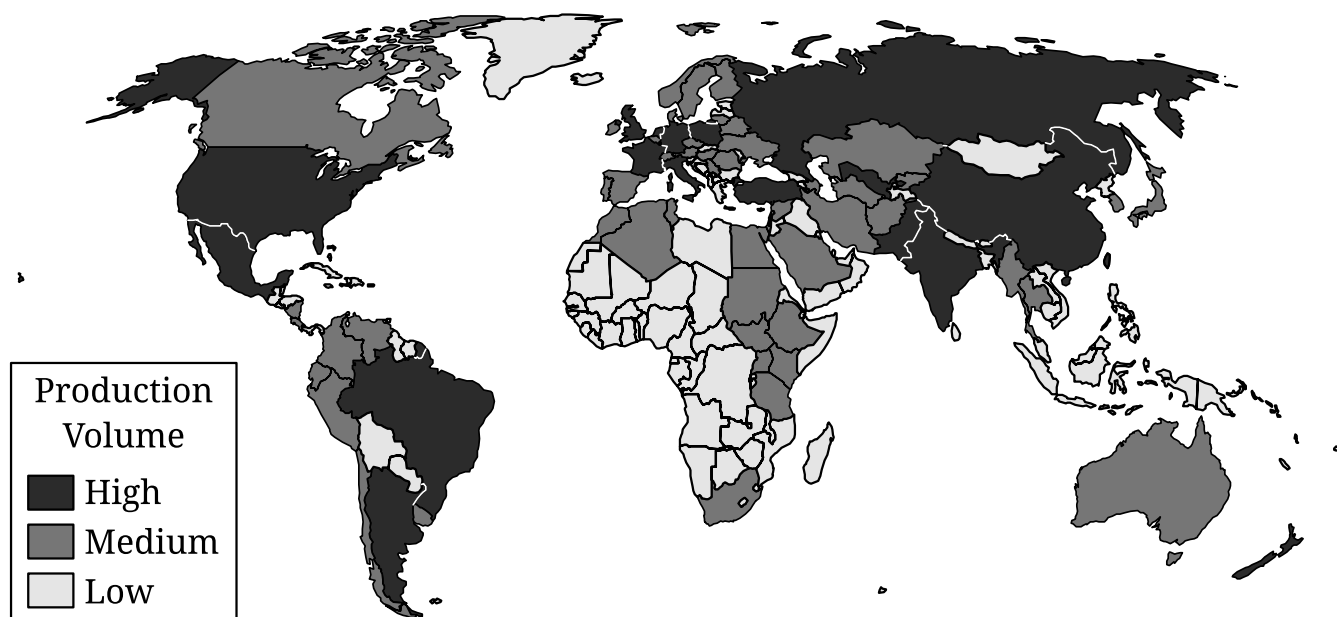
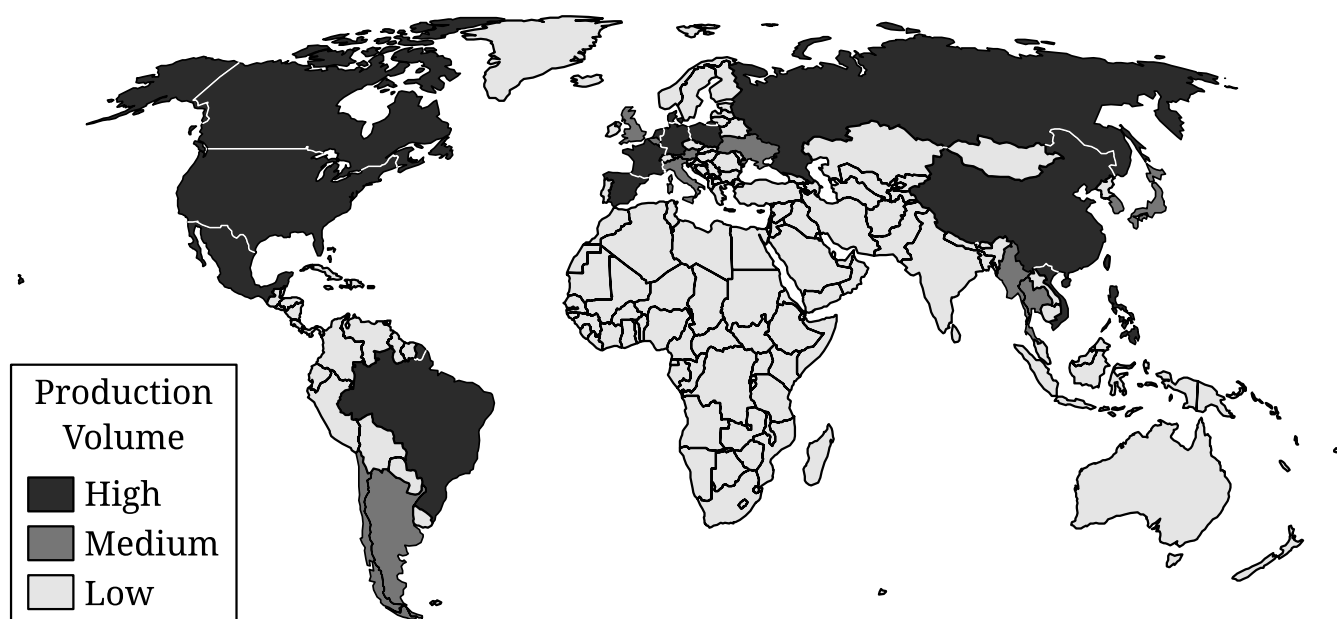


Map 1: Cow's Milk Production, 2018

Source: Food and Agriculture Organization

Map 2: Pork Production, 2018

Source: Food and Agriculture Organization

3. The global production of cow's milk and pork results in distinctive spatial patterns of contemporary agriculture and land use.

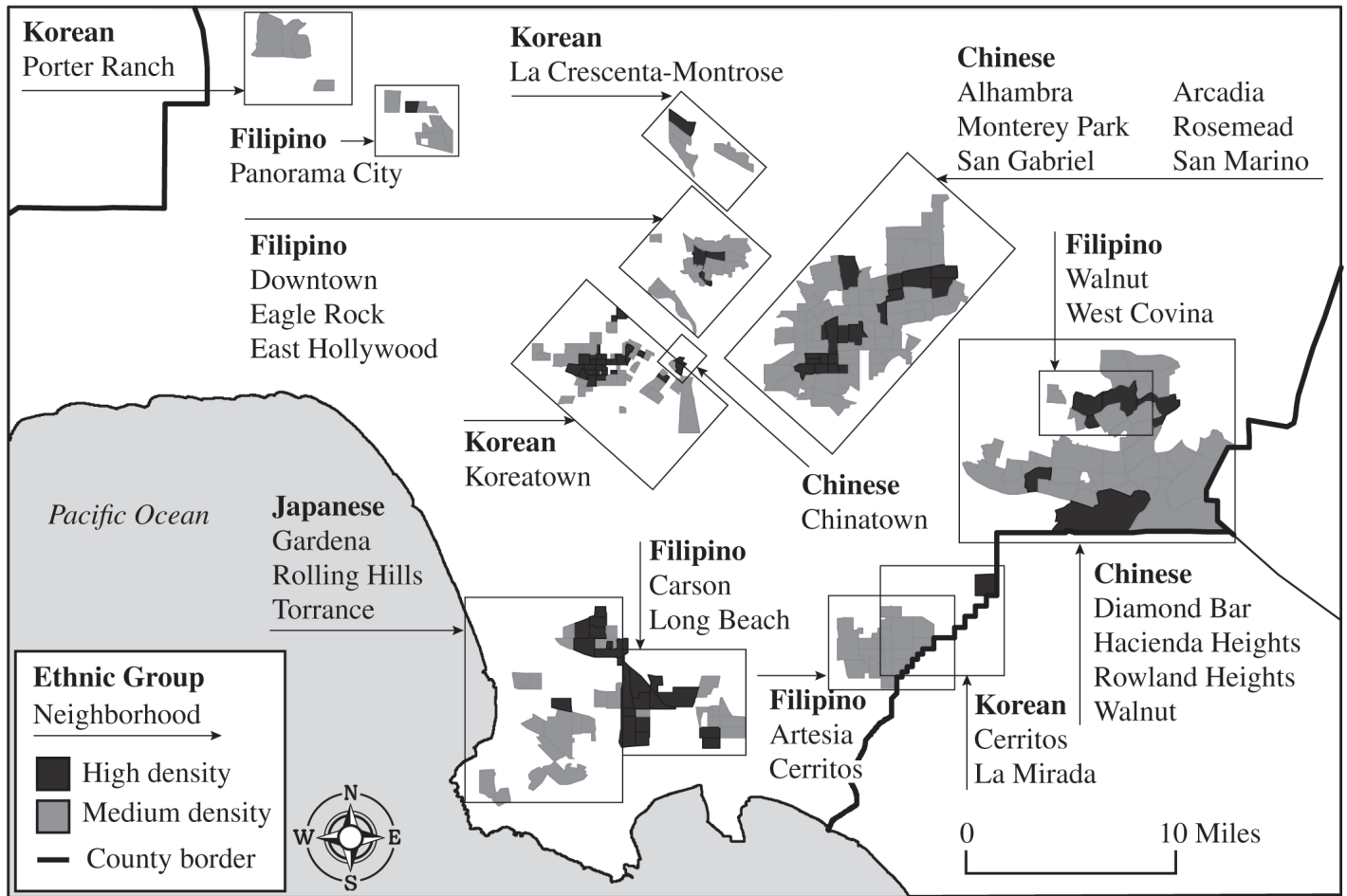
Respond to parts A, B, C, D, E, F, and G.

- A. Identify an example of a culture trait.
- B. Describe the spatial pattern of cow's milk production in Africa, shown in Map 1.
- C. Based on Map 1 and Map 2, compare the spatial patterns of cow's milk production and pork production in Asia. (Response must include both maps in the comparison.)
- D. Describe one environmental effect of agricultural land use such as commercial animal farms.
- E. Explain how the globalization of agriculture may affect local culture traits.
- F. Explain why regions of agricultural production may become interdependent.
- G. Explain how domesticated animals such as pigs spatially diffused to create the spatial pattern shown on Map 2.

STOP

END OF EXAM

Question 2

**Selected Asian Ethnic Neighborhoods
in Los Angeles County, California**

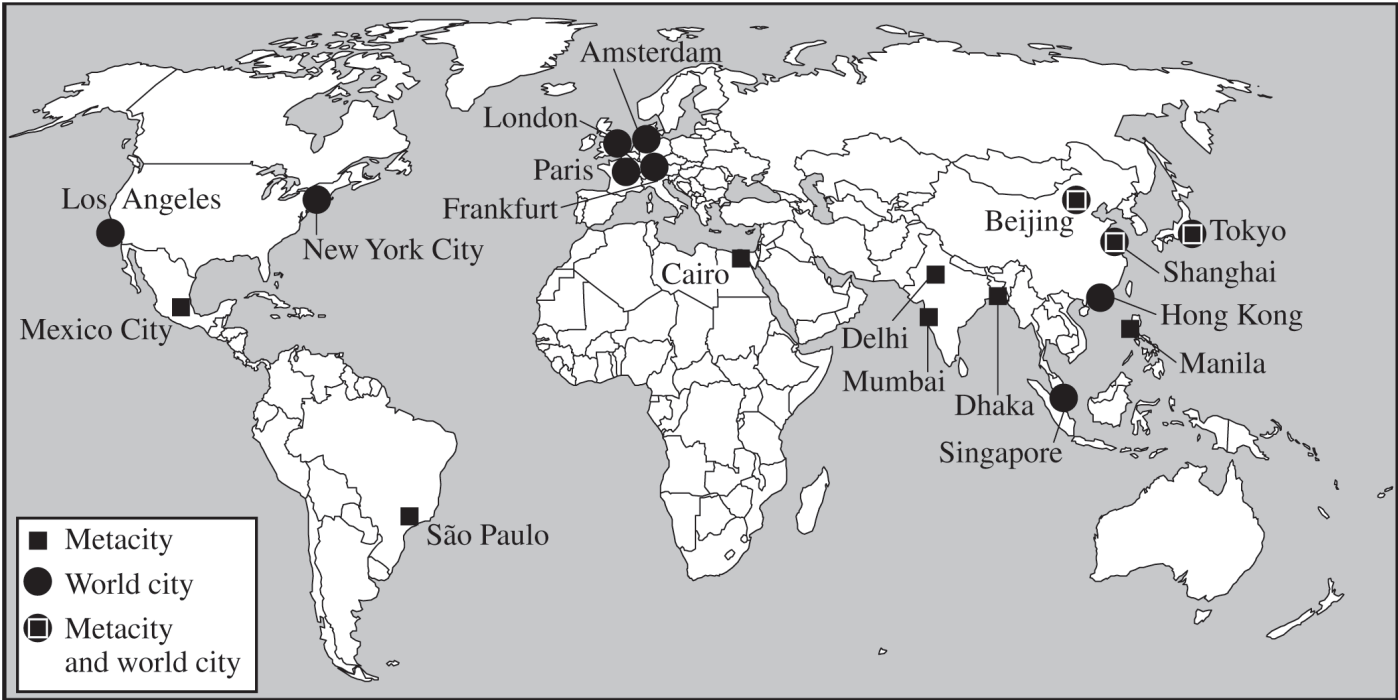
Source: United States Census Bureau

2. The map shows predominantly Asian ethnic neighborhoods in Los Angeles County, California. The names of the neighborhoods and the densities of the ethnic groups are identified on the map.
- A. Identify ONE neighborhood labeled on the map where two or more Asian ethnic groups reside.
 - B. Describe the spatial pattern of Chinese ethnic neighborhoods labeled on the map.
 - C. Explain ONE way immigrants may choose to assimilate into their new place of residence.
 - D. Explain ONE way immigrants may preserve their ethnic traditions in their new place of residence.
 - E. Describe ONE way that ethnic neighborhoods may contribute to a sense of place in large metropolitan areas such as Los Angeles.
 - F. Explain how the process of redistricting may be used to decrease an ethnic community's political power.
 - G. Explain how the process of redistricting may be used to increase an ethnic community's political power.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

Question 3

Metacities and Top-Tier World Cities, 2020



Source: United Nations

Selected Cities

Urban Area	Population, 2000	Population, 2020	Population Growth, 2000 to 2020	City GDP per Capita, 2020	Country GDP per Capita, 2020
Cairo	13.6 million	20.9 million	54%	\$4,865	\$3,609
Dhaka	10.3 million	21.0 million	104%	\$7,920	\$2,001
New York City	17.9 million	18.8 million	5%	\$86,615	\$63,529
Paris	9.7 million	11.0 million	13%	\$71,346	\$39,180

Note: Values are estimates based on publicly available data.

HUMAN GEOGRAPHY**SECTION II****Time—1 hour and 15 minutes****3 Questions**

Directions: You have 1 hour and 15 minutes to answer all three of the following questions. It is recommended that you spend approximately one-third of your time (25 minutes) on each question. It is suggested that you take up to 5 minutes of this time to plan and outline each answer. You may plan your answers in this orange booklet, but no credit will be given for anything written in this booklet. **You will only earn credit for what you write in the separate Free Response booklet.**

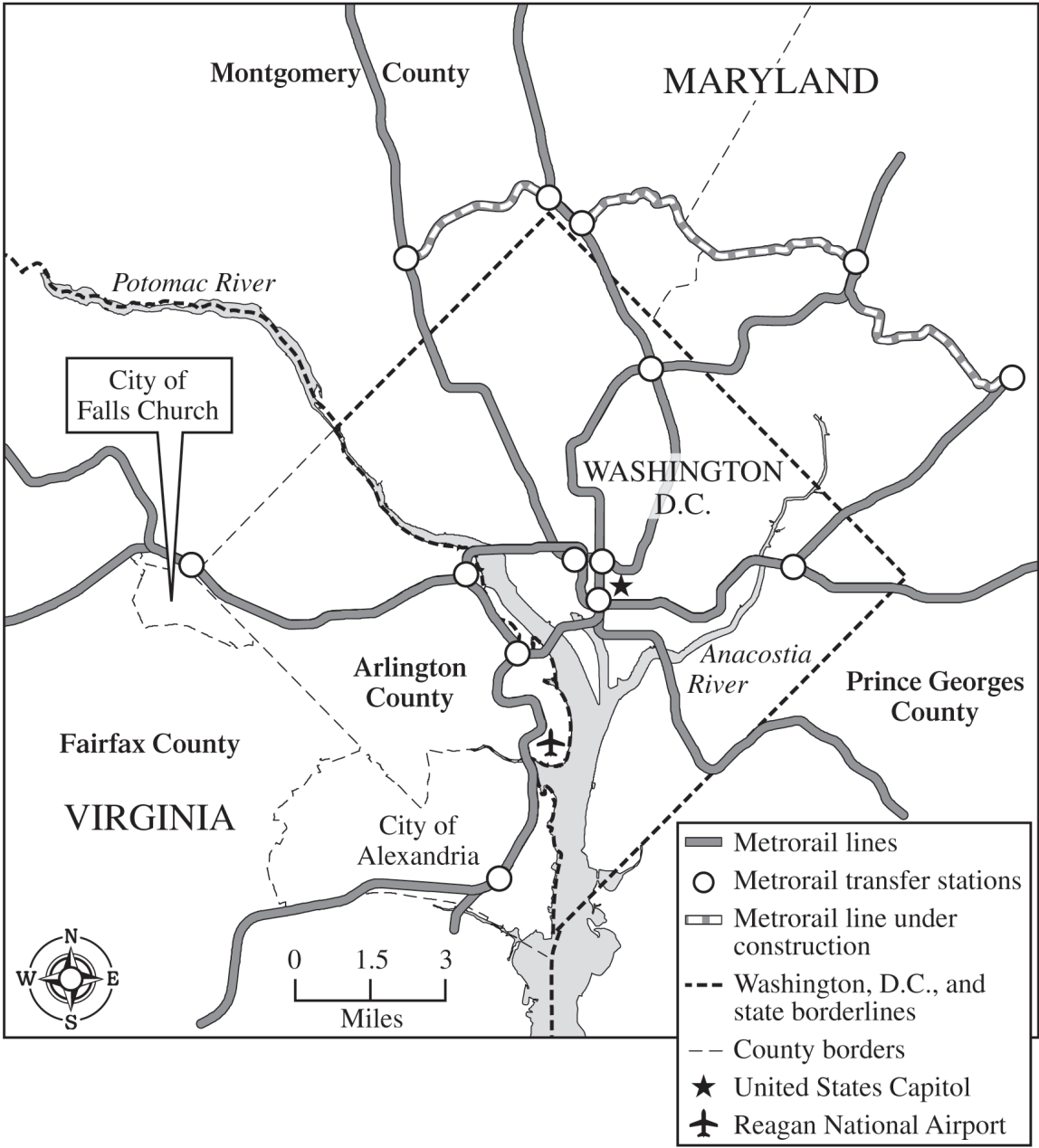
Question 1

1. The interaction of people contributes to the spread of cultural practices that change over time and vary between places. Interactions among cultures can lead to new forms of cultural expression.
 - A. Describe ONE type of diffusion by which culture traits spread.
 - B. Describe the process of creolization of language.
 - C. Describe how the globalization of foods has influenced cultural patterns of food consumption.
 - D. Explain ONE way that agricultural land use practices may have negative environmental effects.
 - E. Explain how a new style of music may be created as a result of cultural diffusion from different regions.
 - F. Explain how toponyms may result from the diffusion of religion across the cultural landscape.
 - G. Explain the degree to which the use of indigenous languages has been influenced by colonialism. (Response must indicate the degree [low, moderate, high] and provide an explanation.)

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

Question 2

Washington, D.C., and Surrounding Jurisdictions



Source: ESRI Data Partners

Question 2

**PER CAPITA PRODUCTION OF STAPLE FOOD CROPS
IN HEARTH-OF-DOMESTICATION COUNTRIES**

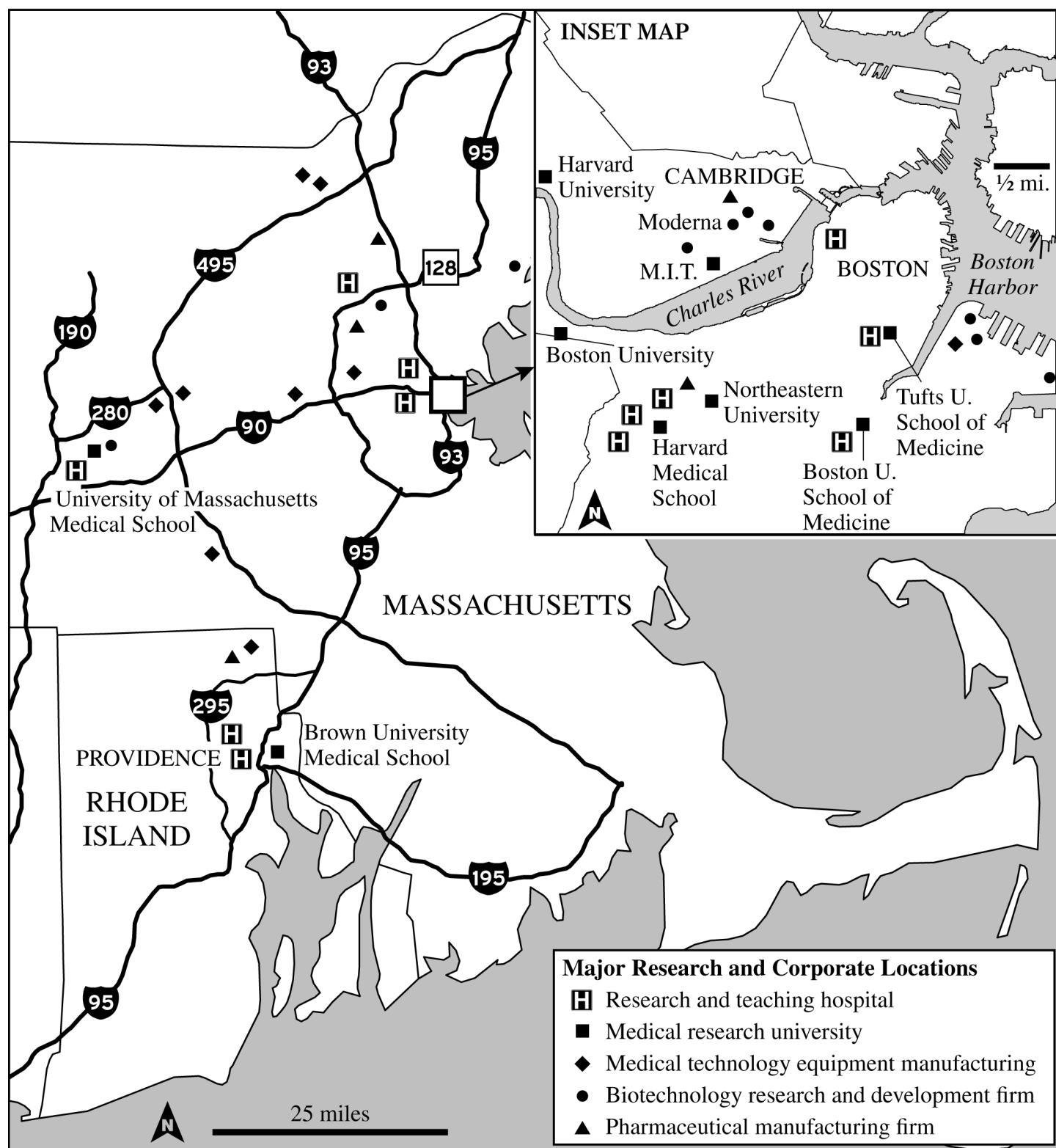
Country	Corn (maize) (pounds per capita)	Potato (pounds per capita)	Rice (pounds per capita)	Yam (pounds per capita)	Cassava (manioc or yuca) (pounds per capita)
	Hearth: Mexico	Hearth: Peru	Hearths: China and Mali	Hearth: Niger River basin	Hearth: Amazon River basin
Brazil	1,056	39	108	3	183
China	412	145	333	0	52
Mexico	471	31	4	0	0
Nigeria	121	15	93	549	618
Peru	107	362	216	0	13

Source: Food and Agriculture Organization of the United Nations

2. Staple food crops provide most of the carbohydrates in people's diets, and some staples are also used as animal feed or in the distillation of ethanol. Cassava is a root crop (tuber) that is the source of farinha, tapioca, and the pearls in bubble tea.
- A. Describe the concept of an early hearth of domestication.
 - B. Identify the crop listed in the table that has diffused the least from its hearth of domestication to the countries listed in the table.
 - C. Explain how food preferences can be a culture trait.
 - D. Explain how the Columbian Exchange contributed to a crop's diffusion beyond its hearth of domestication.
 - E. Explain how the data in the table support the concept of a crop's consumption pattern being the result of globalization.
 - F. Explain why a crop may be farmed intensively in a less developed country and be farmed extensively in a more developed country.
 - G. Explain ONE way the global supply chain links crops such as those listed in the table to consumers in other countries.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

Question 3

MAJOR MEDICAL AND BIOTECHNOLOGY COMPANIES AND INSTITUTIONS IN THE BOSTON AND PROVIDENCE REGION

Source: National Institutes of Health

The inset map shows the downtown areas of Boston and Cambridge, Massachusetts.