

More than 150 years passed from the signing of the Declaration of Independence to the establishment of the national archives. As a result, priceless information was lost. Many documents were stolen or destroyed.

For example, a fire in 1921 consumed the records of the census taken in 1890. This census had differed from previous ones. For the first time, each family received its own record. It contained expanded inquiries on race, home ownership, the ability to speak English, immigration, and naturalization. It also included a question relating to Civil War service. 5

Had these records survived, we would have inimitable information on these issues, as well as American industrialization, westward migration, 10 veteran services, and other characteristics of the American population at that time.

The data would have been incredibly enlightening and useful in limitless applications—to historians, political scientists, and so on—but it is now completely lost to history. 15

It is really quite remarkable that so many valuable records even exist today. Unfortunately, it wasn't until the twentieth century that the government became vigilant and proactive about the safety and preservation of historical records.

1. As used in line 4, the word “consumed” most nearly means

- (A) obsessive
- (B) devoted
- (C) extreme
- (D) incinerated
- (E) devoured

2. The author describes the records of the 1890 census as “inimitable” (line 9) because

- (A) the format was modeled on the censuses being used in Europe
- (B) they would have given us unique, reliable insights into nineteenth-century American life
- (C) there are no other records of who served in the Civil War
- (D) we could have used them to formulate current immigration law
- (E) they are the only U.S. census records with information about Abraham Lincoln’s family

3. Based on the passage, all of the following are true about the 1890 census EXCEPT

- (A) It contained detailed questions.
- (B) Individual families obtained their own records.
- (C) It was used to learn about Civil War veterans.
- (D) It was unlike prior ones.
- (E) It was printed in a number of languages.

4. As used in line 18, the word “vigilant” most nearly means

- (A) protracted
- (B) mawkish
- (C) superficial
- (D) attentive
- (E) obsequious

5. Which of the following statements best supports the author’s conclusion?

- (A) It is time-consuming to wade through historical records.
- (B) The 1890 census was the first to use punch cards.
- (C) America’s historical records were completely ignored in the twentieth century.
- (D) A large number of census schedules are incomplete.
- (E) A special building where archives could be properly stored was built in 1930.

The human body creates a lot of heat. In addition to that which we create by running or jumping, we constantly use energy on involuntary functions such as blinking or blood circulation. These types of processes must go on at all times in the body, without our control, even during sleep. But unlike reptiles, which use only outside sources to heat and cool their bodies, mammals maintain a consistent temperature. Therefore, heat must be controlled, be the source from the outside environment or from our own bodily functions. 5

The body disperses heat into the air by exhaling warm, humidified air and by evaporating sweat. The evaporation of sweat cools both the skin and the blood in the vessels beneath it. This blood then returns to your core, cooling your internal 10 body temperature.

These processes work best when the ambient temperature is around 70 degrees. It begins to become less efficient when the temperature starts to match our core body temperature of 98 degrees. It also does not work as well when the humidity in the air rises, since the rate of evaporation slows down. That's when you begin to 15 feel hot and uncomfortable.

6. All of the following statements can be inferred from the passage EXCEPT
 - (A) To reduce energy costs, air-conditioning systems should be turned on only when the room's temperature rises above 70 degrees.
 - (B) Heat is a by-product of work being done by the body.
 - (C) Because of the nature of our body's temperature control mechanism, we need a cooler ambient temperature for it to function optimally.
 - (D) Humidity has a significant effect because it interferes with the evaporation of sweat.
 - (E) Humans living in cooler climates have less efficient body temperature controls than those who live in warmer climates.
7. Based on the information in lines 2–4, another example of an “involuntary function” performed by the human body could include
 - (A) chewing
 - (B) walking
 - (C) breathing
 - (D) sniffing
 - (E) eating

8. The author mentions reptiles in lines 4–5 in order to

- (A) explain the difference between reptiles and insects
- (B) suggest that humans and reptiles share many evolutionary traits
- (C) emphasize the importance of temperature regulation for all living things
- (D) provide a comparison with the way that mammals deal with temperature changes
- (E) imply that reptilian temperature regulation is superior to that of humans

9. The “core” described in line 10 is most analogous to the body’s

- (A) system
- (B) center
- (C) extremities
- (D) origins
- (E) molecules

10. As used in line 12, the word “ambient” most nearly means

- (A) stoic
- (B) botanical
- (C) surrounding
- (D) fictitious
- (E) punctilious

Food production takes an enormous toll on our environment. There are many procedures involved in the manufacture of food that result in greenhouse gases and other pollutants entering the environment. Some procedures require the consumption of copious amounts of fossil fuels, such as the transportation and refrigeration of food products. The trucks, trains, and planes that carry food around the world are fueled by hundreds of thousands of gallons of gasoline. The electricity required to keep food refrigerated and preserved for human consumption requires the burning of coal or natural gas at power plants. Other factors that detrimentally affect the environment include excessive use of fresh water for irrigation. 5

The production of beef is more damaging to the environment than that of any other food we consume. Grazing is a primary concern. Raising large numbers of cattle requires the production of a vast amount of food for the animals. It is estimated that producing one pound of beef requires about seven pounds of feed. Therefore, with the increase in the number of cattle farms comes ever-increasing demand for plant-based food production, which has its own, though less intense, environmental impact. It also means grain crops that could be used for human consumption or for renewable energy such as biofuels must be used to feed the cattle. 10 15

Land use is also a problem. If the cattle are free-range cattle, large areas of land are required for them to live on. In some developing countries, this has led to devastating deforestation and, subsequently, the loss of rare plants and animal species, particularly in tropical rain forests in Central and South America. 20

Another problem specific to beef production is methane emissions. Some microbes in the stomachs of cattle carry out a process known as methanogenesis, which produces methane. Methane's effect on global warming correlates with changes in methane content in the atmosphere. While many people are aware of the damaging effects of carbon dioxide, they do not realize that methane's global warming potential is 25 times worse, making it a more dire concern. 25

Unfortunately, beef consumption is growing rapidly. This is the result of simple supply and demand factors. Specifically, there are two main causes of demand that are spurring the production of more supply. First, the increase in the world population that has taken place since the advent of modern medicine means that there are more people to consume meat. The second factor is socioeconomic advancement. As citizens in developing nations become financially stable, they can afford to buy more meat. 30 35

Therefore, the only way to reduce the greenhouse gas emissions is for people around the world to significantly cut down on the amount of beef they eat.

11. The author's primary purpose is to

- (A) condemn the practice of deforestation of the rain forest
- (B) explain the effects of the population explosion beginning in the twentieth century
- (C) describe the history of global warming activism
- (D) argue for the reduction of pollution through a decrease in beef production
- (E) introduce legislation for a maximum portion of beef served in restaurants

12. The conclusion above is flawed because

- (A) governments, companies, and individuals are already doing a lot to reduce the carbon footprint of the beef industry
- (B) it doesn't take into account other methods of reducing greenhouse gas emissions
- (C) the beef diet for the average American adult each year is 150 pounds
- (D) cutting down on beef consumption would directly increase malnutrition in developed nations
- (E) raising animals doesn't require the additional, unique considerations that plant production does, such as fertilizer, insecticides, and irrigation

13. As used in line 4, the word "copious" most nearly means

- (A) prosaic
- (B) profuse
- (C) dubious
- (D) amicable
- (E) impeccable

14. According to the passage, which of the following statements can be inferred about beef production?

- I. The practice of raising free-range cattle is friendlier to the environment than traditional methods.
- II. Beef production generates a lot of greenhouse gases because the cattle release large amounts of methane.
- III. The money to be made by raising cattle is a motivating factor in cutting down otherwise unprofitable rain forests.

- (A) I
- (B) II
- (C) I and II
- (D) I and III
- (E) II and III

15. The author would most likely agree with which of the following statements?

- (A) Beef production generates more greenhouse gases than production of any other food we consume.
- (B) Developing nations consume too much of the world's beef.
- (C) Food production is a more dire concern than global warming.
- (D) The scientific community needs to find a way to stop methanogenesis in cows' stomachs.
- (E) Global warming is the direct result of advances in modern medicine.

16. As used in line 8, the word "detrimentally" most nearly means

- (A) obsequiously
- (B) destructively
- (C) informatively
- (D) cooperatively
- (E) sanctimoniously

17. Lines 16–18 suggest that the author regards biofuels as

- (A) a better alternative to natural gas
- (B) having a difficult time gaining public acceptance
- (C) a boon for the economies of nations in Central and South America
- (D) the unfortunate result of a growing world population
- (E) a more important use for grain crops than feeding livestock

18. As used in line 28, the word "dire" most nearly means

- (A) mundane
- (B) urgent
- (C) fortuitous
- (D) garrulous
- (E) deliberate

19. The primary purpose of the fifth paragraph (lines 29–35) is to

- (A) emphasize the socioeconomic advantages of beef production
- (B) explain the growing scale of the beef production industry
- (C) delineate the global warming issues that plague our society
- (D) illustrate the effect of modern medicine on the beef industry
- (E) criticize the unhealthy diet of developed nations

20. As used in line 25, the word “correlates” most nearly means

- (A) rejects
- (B) gesticulates
- (C) corresponds
- (D) deciphers
- (E) obfuscates

21. In lines 33–35, the author implies that along with financial success comes

- (A) sociopolitical conflict
- (B) a more robust daily diet
- (C) an understanding of supply and demand factors
- (D) more use of modern medical techniques
- (E) an increase in nationalized citizenship

22. According to the passage, methane is a serious environmental concern because

- (A) the process of methanogenesis is deadly to humans
- (B) the cattle can become sick from overabundant emissions
- (C) its potential effect on the environment is many times greater than that of carbon dioxide
- (D) most people are unaware of the existence of methane as part of the atmosphere
- (E) it forms a toxic gas when it is combined with carbon dioxide

23. As used in line 28, the word “potential” most nearly means

- (A) hegemony
- (B) umbrage
- (C) iniquity
- (D) capability
- (E) qualm