

Climate Change Quiz (adapted from The Christian Science Monitor)

1. Which of the following is NOT a greenhouse gas?
A. methane B. nitrous oxide C. argon D. ozone
2. On average, approximately what percentage of the Earth's atmosphere by volume consists of carbon dioxide?
A. 4% B. 0.4 % C. 0.04 % D. 0.004 %
3. According to global surface temperature data from the National Oceanic and Atmospheric Administration and NASA's Goddard Institute for Space Studies, how many of the top 10 hottest years on record have occurred in the past 10 years?
A. 0 B. 1 C. 5 D. 9
4. During the late 1960s and the 1970s, a majority of climate scientists predicted that global temperatures would do what?
A. They would decline, possibly ushering in another ice age.
B. They would increase as a result of human industrial activity.
C. They would remain the same.
5. In 2008, what country was found to have overtaken the United States to become the top global emitter of carbon dioxide?
A. India B. Japan C. China D. Russia
6. The term 'albedo' refers to what property of a surface?
A. how long it takes to warm or cool
B. its ability to reflect radiation
C. how fast air flows over it
D. how much carbon dioxide it can absorb
7. According to temperature data, the Earth's surface underwent a period of significant warming from 1910 to 1945, followed by a period of moderate cooling from 1945 to 1975. It then returned to a period of significant warming that continues today. According to most climate scientists, what caused the cooling period?
A. The sun underwent a cyclical low in the amount of radiation it emitted.

- B. The planet saw a period of increased volcanic activity, causing it to cool down.
- C. Soot and other aerosols emitted in the post-war period blocked the sun.
- D. Ocean circulation slowed, preventing warmer water from reaching the polar regions.
8. Approximately how many pounds of carbon dioxide are released by burning one gallon of gasoline?
- A. 1 lb. B. 5 lbs. C. 10 lbs. D. 20 lbs.
9. What energy source is the single largest contributor of human-made carbon dioxide in our atmosphere?
- A. natural gas (methane) B. coal C. petroleum D. nuclear power
10. About how many tons of carbon dioxide does the average American emit annually?
- A. 2 B. 10 C. 20 D. 100

Answers:

1. C. (argon)
2. C (0.04%)
3. D (9)
4. B (That they would increase as a result of human industrial activity.)
5. C (China)
6. B (Its ability to reflect radiation.)
7. C (Soot and other aerosols emitted in the postwar period blocked the sun.)
8. D (20 lbs.)
9. B (coal)
10. C (20)