

1. Global warming is
  - a. an increase in the average global temperature.
  - b. a myth.
  - c. caused by a decrease in atmospheric concentration of greenhouse gasses.
  - d. irreversible.
2. One possible cause of global warming over the past 100 years is
  - a. an increase in solar output.
  - b. an increase in volcanic activity.
  - c. an increase in burning of fossil fuels.
  - d. an increase in land area covered by forests.
3. In California, most fresh water available during the summer months for irrigation and human usage comes from
  - a. monsoonal rain storms.
  - b. snowmelt in the Sierra Nevada mountain range.
  - c. the Colorado River.
  - d. desalination of ocean water.
4. Stream flow measures
  - a. the volume of water that passes a given point in one second.
  - b. how many species of fish can be found in a given area of a stream.
  - c. the amount of trash that flows into the watershed.
  - d. how fast water is moving at a given point in a stream.
5. The amount of water stored in snow is called
  - a. snowpack.
  - b. the summer water reserve.
  - c. Sierra cement.
  - d. snow-water equivalent.
6. The atmospheric conditions at a given place and time are called
  - a. climate.
  - b. temperature.
  - c. weather.
  - d. clouds.
7. Most of the CO<sub>2</sub> emitted into the atmosphere is due to
  - a. natural processes.
  - b. burning of fossil fuels.
  - c. deforestation.
  - d. agriculture industry.
8. Since the industrial revolution, most of the increase in CO<sub>2</sub> concentration in the atmosphere is due to
  - a. natural processes.
  - b. burning of fossil fuels.
  - c. deforestation.
  - d. agriculture industry.
9. If California's average winter temperature continues to warm, what is a potential consequence?
  - a. Mammoth Mountain Ski Area will close.
  - b. Glacial coverage in the Sierra Nevada mountain range will increase.
  - c. Water available during the summer for agriculture in the Central Valley will increase due to winter storms bringing rain instead of snow.
  - d. The snowfall season in the Sierra Nevada mountain range will be shorter, limiting the amount of water available for the rest of California.

Countries with the highest CO <sub>2</sub> emissions				
Country	CO <sub>2</sub> emissions per year (10 <sup>6</sup> Tons) (2006)	Percentage of global total	Avg. emission per km <sup>2</sup> of its land (tons)	CO <sub>2</sub> emissions per year (Tons per person) (2007)
 China	6,103	21.5%	636	4.9
 United States	5,752	20.2%	597	19.3
 Russia	1,564	5.5%	91	11.6
 India	1,510	5.3%	459	1.4
 Japan	1,293	4.6%	3421	9.8
 Germany	805	2.8%	2254	9.6
 United Kingdom	568	2.0%	2338	8.9
 Canada	544	1.9%	54	16.5
 South Korea	475	1.7%	4758	10.5
 Italy	474	1.7%	1573	7.7

10. According to the chart above, the country with the highest CO<sub>2</sub> emissions per km<sup>2</sup> of land area is
- United States
  - China
  - South Korea
  - United Kingdom
11. According to the chart above, the country with the highest total CO<sub>2</sub> emissions is
- United States
  - China
  - South Korea
  - United Kingdom
12. According to the chart above, the country with the highest CO<sub>2</sub> emissions per person is
- United States
  - China
  - South Korea
  - United Kingdom
13. What is one possible effect of local warming on migration patterns?
- Migrating animals will begin their migration earlier in the spring.
  - Migrating animals will become extinct.
  - Migrating animals will move to lower elevations during the summer where the temperature is warmer.
  - Migrating animals will stop their migration altogether.