

Sustainability Literacy Assessment – Spring 2015

Questions:

1. Which of the following behavioral changes would likely have the biggest impact in reducing an average American's carbon footprint?
 - a. Become vegetarian or vegan
 - b. Stop driving and only walk or ride a bicycle as means of transportation
 - c. Begin recycling and composting as much personal trash as possible
 - d. Retrofit one's home to improve efficiency
 - e. Don't know

2. When measured in terms of area of land occupied, what human activity is responsible for the greatest land use.
 - a. Building of villages, towns, and cities
 - b. Transportation infrastructure
 - c. Mineral extraction
 - d. Agriculture
 - e. Don't know

3. Which of the following is associated with the greatest total impact in regards to human-caused climate change.
 - a. Ozone
 - b. Water Vapor
 - c. Methane
 - d. Carbon dioxide
 - e. Don't know

4. Which of the following provides the largest share of the electricity used by the University of Minnesota, Morris?
 - a. Coal
 - b. Wind
 - c. Solar
 - d. Natural Gas
 - e. Don't know

5. How many tons of food waste does the Morris campus divert from the landfill each year and into our on-campus composting program?
 - a. over 5 tons
 - b. over 10 tons
 - c. over 30 tons
 - d. over 50 tons
 - e. Don't know

6. What is the most common cause of pollution of streams and rivers in Stevens County?

- a. Dumping of garbage by cities
 - b. Surface water running off yards, city streets, paved lots, and farm fields
 - c. Litter near streams and rivers
 - d. Waste dumped by factories
 - e. Don't know
7. Ozone forms a protective layer in the earth's upper atmosphere. What does ozone protect us from?
- a. Acid rain
 - b. Climate change
 - c. Sudden changes in temperature
 - d. Harmful UV Rays
 - e. Don't know
8. In the United States what is the primary federal agency that oversees environmental regulation?
- a. Environmental Protection Agency (the EPA)
 - b. Department of Health, Environment, and Safety (the DHES)
 - c. National Environmental Agency (the NEA)
 - d. Federal Pollution Control Agency (the FPCA)
 - e. Don't know
9. Which of the below is most similar to the definition of sustainability adopted by the Brundtland report?
- a. Creating a government welfare system that ensures universal access to education, healthcare, and social services
 - b. Setting aside resources for preservation, never to be used
 - c. Meeting the needs of the present without compromising the ability of future generations to meet their own needs
 - d. Building a neighborhood that is both socio-demographically and economically diverse
 - e. Don't know
10. In the U.S., what do we currently do with the nuclear waste generated by nuclear power plants?
- a. Use it as nuclear fuel
 - b. Sell it to other countries
 - c. Dump it in landfills
 - d. Store and monitor the waste
 - e. Don't know
11. According to Oxfam, globally what percentage of total wealth is controlled by the wealthiest 1% of the population
- a. 20%

- b. 35%
 - c. 50%
 - d. 85%
 - e. Don't know
12. Many economists argue that electricity prices in the U.S. are too low because...
- a. They do not reflect the costs of pollution from generating the electricity
 - b. Too many suppliers go out of business
 - c. Electric companies have a monopoly in their service area
 - d. Consumers spend only a small part of their income on energy
 - e. Don't know
13. Which of the following is a leading cause of the depletion of fish stocks in the Atlantic Ocean?
- a. Fishermen seeking to maximize their catch
 - b. Reduced fish fertility due to genetic hybridization
 - c. Ocean pollution
 - d. Global climate change
 - e. Don't know
14. Which of the following is the most accurate list of some of the potential effects of global climate change that most concern climate scientists?
- a. Displacement of 150 million people by 2050, severe disruption of agriculture, potential extinction of up to 5% of terrestrial species
 - b. Higher fuel prices, loss of ozone layer, increased cancer rates
 - c. More crops due to higher rates of plant growth, establishment of large snakes in the Everglades, resurgence of historic diseases such as cholera
 - d. There is no scientific consensus regarding the effects of climate change
 - e. Don't know
15. The most significant driver in the loss of species and ecosystems around the world is....
- a. Overhunting/overharvesting
 - b. Conversion of natural spaces into human developments (farmland, cities, etc.)
 - c. Acid rain
 - d. Breeding of animals in zoos
 - e. Don't know
16. Which of the following factors influence the human population's impact on Earth: (A) size of the population, (B) amount of materials used per person, (C) use of technology that improve energy efficiency?
- a. A, B, and C
 - b. A and B, but not C
 - c. B and C, but not A
 - d. A, but not B or C

- e. Don't know
17. Which of the following statements about water is true?
- a. Globally, water for personal use such as washing dishes, doing laundry, and bathing is the major user of water resources.
 - b. Globally, freshwater reserves (aquifers) are used faster than they are replenished.
 - c. Floods and severe weather will increase the availability of clean drinking water.
 - d. Because water is a free and abundant resource, it is not a major concern for most countries.
 - e. Don't know
18. Imagine that we had to pay for all the costs associated with the goods we use every day. What would go into calculating the true costs of a product?
- a. The cost of raw materials to make the product
 - b. The cost of environmental damage caused by production
 - c. The cost of health care for employees who manufacture the product
 - d. All of the above
 - e. A and B
19. Put the following list in order of the activities with the largest environmental impact to those with the smallest environmental impact: (A) keeping a cell phone charger plugged into an electrical outlet for 12 hours, (B) producing one McDonald's quarter-pound hamburger (C) producing one McDonald's chicken sandwich (D) flying in a commercial airplane from Washington D.C. to China.
- a. A, C, B, D
 - b. D, A, B, C
 - c. D, C, B, A
 - d. D, B, C, A
 - e. Don't know
20. Which river does the Pomme de Terre flow into first?
- a. The Mississippi
 - b. Hawk Creek
 - c. Lac Qui Parle
 - d. The Yellow Medicine
 - e. The Minnesota

Qualitative Questions:

21. Has your Morris education prepared you to answer the questions above? Please, explain.

Answers:

1) a, 2) d, 3) d, 4) b, 5) c, 6) b, 7) d, 8) a, 9) c, 10) d, 11) c, 12) a, 13) a, 14) a, 15) b, 16) a, 17) b, 18) d, 19) c, 20) e