

Sustainability Literacy Assessment.Freshman.Fall 2012

The following survey will test your knowledge of sustainability after just having arrived on campus. Please answer the questions to the best of your ability. You will receive the same survey again at the end of your senior year. They surveys will show us how much you have learned about the principles of sustainability during your time at ESF.

Thank you in advance for completing this survey. It should take you 5 - 10 minutes to complete. The results will be used to inform the College's future work.

If you have any questions about the survey, please email sustainability@esf.edu.

1. What is your home department?

- Chemistry
- Environmental & Forest Biology
- Environmental Resources Engineering
- Environmental Science
- Environmental Studies
- Forest and Natural Resources Management
- Landscape Architecture
- Paper and Bioprocess Engineering
- Sustainable Construction Management and Engineering
- Undeclared
- Other (please specify)

2. Which of the following is a renewable resource?

- Oil
- Iron ore
- Trees
- Coal
- All of the above
- Do not know

3. Producing the plastic in a single bottle from virgin plastic (materials never before manufactured) requires _____ the amount of energy to make the same bottle from recycled plastic taking into account all related processes.

- Almost no energy compared to
- Half
- Equal
- More than eight times
- Do not know

4. A technique to assess environmental impacts associated with all the stages of a product's life from cradle to grave (resource extraction through usage and disposal), is called:

- An annual review
- A life cycle assessment
- An energy audit
- A thermal system analysis
- Do not know

5. Corporate social responsibility implies a commitment to triple bottom line reporting, which includes:

- Three forms of financial reporting
- Ecological, social and financial performance
- Multiple employee performance
- All of the above
- Do not know

6. Many scientists say the Earth's average temperature is increasing. They say that one important cause of this change is:

- Acid rain
- Rising ocean levels
- The sun is moving closer to the earth
- Increasing carbon dioxide concentrations from burning fossil fuels
- Increasing carbon dioxide concentrations from nuclear power plants
- Do not know

7. "Sustainability" with regard to natural resources means:

- Using natural resources as slowly as possible
- Using only as much as is replaced by natural processes
- Not introducing new technology too quickly
- Discovering new resources to allow maximum economic growth
- Do not know

8. Which of the following statements about greenhouse gasses is FALSE?

- Humans would be better off without greenhouse gasses
- Greenhouse gasses allow solar radiation to reach Earth, but keep it from escaping back into space
- Increased greenhouse gasses trap solar radiation in the atmosphere
- There are many different greenhouse gasses, not just carbon dioxide
- All of the above are TRUE
- Do not know

9. The Urban Heat Island Effect is:

- An increased desire to live in rural areas
- An increased number of islands being discovered in tropical zones
- An increase in the number of cities that cut off exports and imports during hot summer months
- A rising of temperature in urban areas due to the density of buildings and other human structures and the sparseness of sunlight-absorbing greenery
- All of the above
- Do not know

10. Which of the following is a principle of systems thinking?

- It views the measured outcome within the larger, more complex system
- It addresses problems in a way that does not create new problems in the future
- It considers the impact of actions beyond environmental, economic and social to also include time and space
- It can be thought of as the three dimensional ripple effect of your actions where nearly everything is somehow interrelated and interconnected
- All of the above
- Do not know

11. What does it mean if an electric power plant is 35% efficient?

- For every \$100 invested in the production of energy, \$35 is made into profit
- For every \$35 invested in the production of energy, \$100 is made into profit
- For every 100 units of energy that go into the plant, 35 units are lost during energy transformations
- For every 100 units of energy that go into the plant, 35 units are converted into electrical energy
- For every 35 units of energy that go into the plant, 100 units of electrical energy are produced
- Do not know

Thanks again for completing our survey!