

Chapter 1 REVIEW

TRUE/FALSE

1. While heavily dependent on the environment, we are not dependent for everything we need to stay alive and healthy.
2. Environmental science is a branch of environmentalism and has the aim of protecting the earth's life-support systems.
3. The three overarching themes relating to the long-term sustainability of life on this planet are: solar energy, biodiversity, and energy cycling.
4. Natural services are functions of nature, such as purification of air and water, which support life and human economies.
5. In environmental science, individuals tend to matter less because the issues are global in nature.
6. Take away solar energy and all natural capital would collapse.
7. More than 1.4 billion people in today's world struggle to live on an income of \$1.25 or less per day.
8. Natural capital includes both natural resources and natural services.
9. If everyone on earth consumed at the rate of an average U.S. citizen, the earth could only support about 5 billion of the 6.9 billion now alive.
10. A drainpipe of a factory that is releasing a pollutant, is an example of nonpoint source of pollution.
11. The *Tragedy of the Commons* refers to a lack of agricultural resources available for the common (poor) people in a country.
12. The amount of biologically productive land and water required to supply the people in a country with renewable resources and recycling wastes and pollution is the ecological footprint.
13. An environmental problem that is not addressed can continue to grow until it reaches an often irreversible tipping point.
14. Pollutants are all human-made; they can not enter the environment naturally.
15. Species are becoming extinct at least 100 times faster than they were in pre-human times.
16. Pollution cleanup is usually the best way of dealing with the release of a pollutant.
17. The harmful environmental effects of poverty are much worse than those of affluence.:
18. Overall, the air quality is poorer and drinking water more polluted today than in the 1970s.

19. A basic cause of environmental problems results from the fact that companies using resources have to pay for the cost of the harmful environmental costs of supplying their products.
20. The old lesson that you should “protect your capital and live on the income it provides” applies to the use of the earth’s natural capital as well as financial resources.

COMPLETION

1. _____ is the capacity of the earth’s natural systems and human cultural systems to survive, flourish, and adapt to changing environmental conditions indefinitely.
2. Our lives and economies depend on energy from _____ and natural resources and natural services provided by the earth.
3. Natural Capital equals _____ plus _____.
4. The circulation of chemicals necessary for life, from the environment through organisms and back to the environment, is called _____.
5. Changes in a country's economic growth per person are measured by _____.
6. Some of the world’s countries are called low-income, _____-_____ countries, and include Congo, Haiti, Nigeria, and Nicaragua.
7. A resource such as solar energy, that is constantly available, is called a(n) _____.
8. Fish, fresh air, forests, and fertile soil are examples of _____.
9. Old drink bottles that are collected, washed, and refilled are an example of _____.
10. _____ is the amount of biologically productive land and water needed to supply the people in a particular country or area with an indefinite supply of renewable resources and to absorb and recycle the wastes and pollution produced by such resource use.

11. Approximately one-third of all land in the US is jointly owned by all US citizens and managed for them by the government. This type of property is called _____ and is often degraded.
12. Environmental degradation, also known as _____ is the process of wasting, depleting, and degrading the earth's natural capital at an accelerating rate.
13. The exhaust pipe of an automobile or the smokestack of a coal-burning powerplant are examples of _____ sources.
14. One way of dealing with pollution is to clean up pollutants after we have produced them, which is called _____.
15. If everyone consumed as much as the average American does today, the earth could indefinitely support only about _____ of the currently 6.9 billion people.
16. IPAT is a simple way of looking at how three factors influence the impact humans have on the environment. The formula is $\text{Impact} = \text{Population (P)} \times \text{_____} \times \text{Technology (T)}$.
17. _____ is the world's leading consumer of wheat, rice, meat, coal, fertilizers, steel, and cement.
18. An often irreversible shift in the behavior of a natural system is caused when an environmental problem builds slowly until it reaches an _____.
19. Your _____ is a set of assumptions and values reflecting how you think the world works and what you think your role in the world should be.