Chapter 2

Student: _____

1. Mineral stocks, fisheries and water are all examples of _____.
A. renewable resources
B. non-renewable resources
C. natural resource capital
D. environmental capital

2. The stock of natural and environmental resources that sustain ecosystems, the economy and the well-being of individuals is referred to as _____.
A. renewable resources
B. biological diversity
C. ambient quality
D. natural capital

3. In the phrase "natural capital," the word "capital" captures the economic concept that nature is _____.
A. a store of value
B. capable of producing goods and services
C. depletable over time
D. all of the choices are correct

4. The trade-off that exists between harvesting as much as possible of a renewable resource today versus waiting for the future exemplifies the _____ of many natural resource management issues.
A. sustainability
B. intertemporal dimension
C. short-run impact
D. efficiency

5. When a new production technology is invented that results in production of smaller amounts of residuals per unit of output produced, this is called reducing the _____.
A. damages from production
B. intensity of pollution
C. residuals from production
D. residuals intensity of production

6. The residuals from production can be reduced by _____.
A. shifting the composition of output towards low-residual items
B. preventing pollution by reducing the energy inputs required to produce each unit of output
C. reducing the residuals intensity of production
D. all of the choices are correct

7. Low-phosphate detergents, mercury-free thermometers and energy-efficient appliances are all examples of _____.
A. pollution-intensive goods
B. low-carbon goods
C. environmentally friendly goods
D. pollution-free goods

8. As long as the capacity of the earth's atmosphere to absorb emissions of CO_2 is not exceeded, CO_2 is a(n) _____ pollutant. Once the capacity of the atmosphere to absorb CO_2 is exceeded, it becomes a(n) _____ pollutant.
A. episodic; continuous
B. non-accumulative; accumulative
C. regional; global
D. accumulative; non-accumulative

9. An accidental oil spill is an example of a(n) _____ emission while municipal treated waste is an example of a(n) _____ emission.
A. continuous; episodic
B. global; local
C. point source; nonpoint source
D. episodic; continuous

10. Continued extraction of a non-renewable resource can be sustainable over time if managed properly.
True False

11. A living resource can become non-renewable if the rate of harvest exceeds the growth rate of the resource's stock.
True False

12. It is more difficult to develop and administer control policies for point source pollutants than it is for nonpoint source pollutants.
True False

13. Land is one of the three components that comprise natural capital. List the other two components discussed in the textbook and give one example of each.

14. Define the terms "renewable resource" and "non-renewable resource" and give one example of each type.

15. Discuss why using a Zero Population Growth (ZPG) strategy to reduce output and/or to halt the rate of growth of output does not guarantee that the environmental impacts of production will be controlled.

16. List one example each of a local, regional and global pollutant.

Chapter 2 Key

1. Mineral stocks, fisheries and water are all examples of _____.
A. renewable resources
B. non-renewable resources
C. natural resource capital
D. environmental capital

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #1
Learning Objective: 02-01 Describe the three components of natural capital and give specific examples of each type.

2. The stock of natural and environmental resources that sustain ecosystems, the economy and the well-being of individuals is referred to as _____.
A. renewable resources
B. biological diversity
C. ambient quality
D. natural capital

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #2
Learning Objective: 02-01 Describe the three components of natural capital and give specific examples of each type.

3. In the phrase "natural capital," the word "capital" captures the economic concept that nature is _____.
A. a store of value
B. capable of producing goods and services
C. depletable over time
D. all of the choices are correct

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #3
Learning Objective: 02-01 Describe the three components of natural capital and give specific examples of each type.

4. The trade-off that exists between harvesting as much as possible of a renewable resource today versus waiting for the future exemplifies the _____ of many natural resource management issues.
A. sustainability
B. intertemporal dimension
C. short-run impact
D. efficiency

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #4
Learning Objective: 02-02 Explain the intertemporal trade-offs with natural capital use.

5. When a new production technology is invented that results in production of smaller amounts of residuals per unit of output produced, this is called reducing the _____.
A. damages from production
B. intensity of pollution
C. residuals from production
D. residuals intensity of production

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #5
Learning Objective: 02-03 Describe ways to reduce residuals from the economy.

6. The residuals from production can be reduced by _____.
A. shifting the composition of output towards low-residual items
B. preventing pollution by reducing the energy inputs required to produce each unit of output
C. reducing the residuals intensity of production
D. all of the choices are correct

Accessibility: Keyboard Navigation
Difficulty: Moderate
Field - Chapter 02 #6
Learning Objective: 02-03 Describe ways to reduce residuals from the economy.

7. Low-phosphate detergents, mercury-free thermometers and energy-efficient appliances are all examples of _____.
A. pollution-intensive goods
B. low-carbon goods
C. environmentally friendly goods
D. pollution-free goods

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #7
Learning Objective: 02-03 Describe ways to reduce residuals from the economy.

8. As long as the capacity of the earth's atmosphere to absorb emissions of CO_2 is not exceeded, CO_2 is a(n) _____ pollutant. Once the capacity of the atmosphere to absorb CO_2 is exceeded, it becomes a(n) _____ pollutant.
A. episodic; continuous
B. non-accumulative; accumulative
C. regional; global
D. accumulative; non-accumulative

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #8
Learning Objective: 02-04 Describe the different categories of pollution and contrast the degree of complexity in reducing emissions.

9. An accidental oil spill is an example of a(n) _____ emission while municipal treated waste is an example of a(n) _____ emission.
A. continuous; episodic
B. global; local
C. point source; nonpoint source
D. episodic; continuous

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #9
Learning Objective: 02-04 Describe the different categories of pollution and contrast the degree of complexity in reducing emissions.

10. Continued extraction of a non-renewable resource can be sustainable over time if managed properly.
FALSE

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #10
Learning Objective: 02-02 Explain the intertemporal trade-offs with natural capital use.

11. A living resource can become non-renewable if the rate of harvest exceeds the growth rate of the resource's stock.
TRUE

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #11
Learning Objective: 02-02 Explain the intertemporal trade-offs with natural capital use.

12. It is more difficult to develop and administer control policies for point source pollutants than it is for nonpoint source pollutants.
FALSE

Accessibility: Keyboard Navigation
Difficulty: Easy
Field - Chapter 02 #12
Learning Objective: 02-04 Describe the different categories of pollution and contrast the degree of complexity in reducing emissions.

13. Land is one of the three components that comprise natural capital. List the other two components discussed in the textbook and give one example of each.

The other two components of natural capital are natural resource capital and environmental capital (or ecosystems). An example of natural resource capital is water (other possible answers could include minerals and energy stocks, forests or fisheries). An example of environmental capital is the earth's atmosphere (other possible answers could include forests, grasslands, wetlands or some other specific ecosystem).

Difficulty: Easy
Field - Chapter 02 #13
Learning Objective: 02-01 Describe the three components of natural capital and give specific examples of each type.

14. Define the terms "renewable resource" and "non-renewable resource" and give one example of each type.

A renewable resource grows over time through biological processes so that the harvest of this resource could be sustainable over time. An example of a renewable resource is a fishery (other possible answers could include lumber, solar energy, wind power or hydroelectric power). A non-renewable resource has a fixed stock which has no processes of replenishment so that extraction of this resource is not sustainable over time. An example of a non-renewable resource is coal (other possible answers could include oil, natural gas or mineral stocks such as copper).

Difficulty: Moderate
Field - Chapter 02 #14
Learning Objective: 02-02 Explain the intertemporal trade-offs with natural capital use.

15. Discuss why using a Zero Population Growth (ZPG) strategy to reduce output and/or to halt the rate of growth of output does not guarantee that the environmental impacts of production will be controlled.

There are two reasons why ZPG might not control the environmental impacts of production. First, even with no growth in the population, the economy could still grow resulting in increased demand for inputs from nature. Second, environmental impacts can be long run and cumulative so that even a stationary population can degrade the environment over time.

Difficulty: Moderate
Field - Chapter 02 #15
Learning Objective: 02-03 Describe ways to reduce residuals from the economy.

16. List one example each of a local, regional and global pollutant.

An example of a local pollutant would be noise pollution (other possible answers could include litter or cigarette smoke from a neighbour). An example of a regional pollutant is acid rain which occurs in parts of Canada and the US mainly as a result of emissions from the US (other possible answers could include smog or ground level ozone). An example of a global pollutant is CO_2 which is a greenhouse gas that contributes to the problem of global warming (other possible answers could include other greenhouse gases or CFCs).

Difficulty: Easy
Field - Chapter 02 #16
Learning Objective: 02-04 Describe the different categories of pollution and contrast the degree of complexity in reducing emissions.

Chapter 2 Summary

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