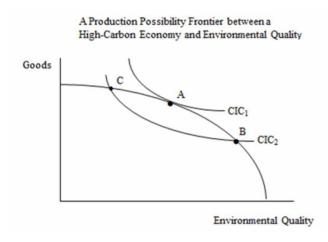
## Chapter 1

	Student:
1.	A(n) in the economic world is something that leads people to channel their production and consumption efforts in a specific direction.  A. moral obligation  B. economic incentive  C. property right  D. ethical motive
2.	Any economic system will produce destructive environmental impacts if the within the system are not structured to avoid them.  A. ethics B. prices C. property rights D. incentives
3.	A small coastal community with the power to control access to its scallop fishery is an example of  A. common property rights B. private property rights C. an open access resource D. a positive externality
4.	A common pasture on which anyone is allowed to freely graze sheep or cattle is an example of  A. private property rights B. an open access resource C. common property rights D. community property rights
5.	The level of pollution can be negotiated privately based on property rights when only a few parties are involved and the source, amount and type of pollution is clearly identifiable.  A. cost-effective  B. zero-emissions  C. fair  D. socially efficient
6.	When you enjoy the view of your neighbour's prize-winning garden, this is an example of  A. common property rights  B. a positive externality  C. a negative externality  D. a public good
7.	When we drive our cars, we get the of transportation services, while others experience the detrimental effects such as pollution and congestion which environmental economists refer to as a(n)  A. positive externality; negative externality B. direct benefit; opportunity cost C. direct benefit; negative externality D. positive externality; opportunity cost

8.	The number of kilometres a household drives its vehicles each year is determined by its of driving.  A. opportunity cost B. private cost C. social cost D. external cost
9.	Forests, wetlands and oceans are referred to as because of their ability to absorb CO <sub>2</sub> .  A. carbon sources B. carbon stores C. carbon cycles D. carbon sinks
10.	The largest source of anthropogenic greenhouse gas emissions globally comes from  A. electricity generation and heat B. transportation C. agriculture D. coal mining
11.	When considering strategies to mitigate the impact of climate change, the concept that society should consider the trade-off between the cost of preventive measures taken today versus the benefits arising from reduced future risk is known as  A. adaption  B. the precautionary principle C. benefit-cost analysis D. climate modeling
12.	A tax on carbon emissions, standards to improve the energy efficiency of vehicles and appliances and policies that promote solar and wind energy are all examples of  A. the precautionary principle B. adaption C. carbon trading D. greenhouse gas mitigation policies
13.	An economy that has the ability to allow the level of people's well-being to rise or at least remain constant over time is  A. sustainable B. equitable C. self-perpetuating D. efficient

In the following figure, the mix of carbon-intensive goods and environmental quality given by \_\_\_\_\_\_ provides society with the highest possible level of well-being.



- A. bundle A
- B. bundle B
- C. bundle C
- D. none of the choices are correct
- 15. Economic efficiency is the only criterion used by environmental economists to evaluate environmental policies.

True False

16. People make the decision to pollute or not based on the incentives that arise from the set of economic and social institutions under which they find themselves.

True False

17. Only profit-motivated corporations are responsible for pollution.

True False

18. Environmental resources generally have well defined property rights.

True False

19. Anthropogenic sources of carbon dioxide include volcanic activity, decaying plant matter and photosynthesis.

True False

20. Coal-fired plants are a major source of greenhouse gas emissions in the electricity sector worldwide. True False

21.	Climate change models have predicted an increase in the earth's temperature, greater climate variability and more extreme weather events in the 21 <sup>st</sup> century if greenhouse gas emissions from human activity continue to be emitted at their current pace.  True False
22.	The production possibility frontier showing the trade-offs between production of high-carbon goods and environmental quality for a certain region never changes.  True False
23.	Assume the natural environment including air, water and land can be used to produce either good A, B or C (but not all). If the value of use is \$50 for good A, \$60 for good B and \$40 for good C, which good should be produced if the decision is based on economic efficiency?
24.	Assume the natural environment including air, water and land can be used to produce either good X, Y of Z (but not all). If the value of use is \$700 for good X, \$600 for good Y and \$400 for good Z, which good should be produced if the decision is based on economic efficiency?
25.	Define the three different types of equity employed in environmental economics to help evaluate economic outcomes.
26.	List three examples of policies that could be implemented to reduce emissions from household vehicle use and very briefly explain how each would result in lower emissions.

Cha	pter	1	Key
		_	

1.	A(n) in the economic world is something that leads people to channel their production and consumption efforts in a specific direction.
	A. moral obligation
	<b>B.</b> economic incentive
	C. property right
	D. ethical motive
	Accessibility: Keyboard Navigation Difficulty: Eas Field - Chapter 01 #.
2.	Learning Objective: 01-02 Describe the incentives that contribute to pollution arising from people and firms.  Any economic system will produce destructive environmental impacts if the within the system are not structured to avoid them.
	A. ethics
	B. prices
	C. property rights
	<u><b>D.</b></u> incentives
	Accessibility: Keyboard Navigation Difficulty: Eas
3.	Field - Chapter 01 #2  Learning Objective: 01-02 Describe the incentives that contribute to pollution arising from people and firms.  A small coastal community with the power to control access to its scallop fishery is an example of
	A. common property rights
	B. private property rights
	C. an open access resource
	D. a positive externality
	Accessibility: Keyboard Navigation
	Difficulty: Eas- Field - Chapter 01 #3
Learn	ing Objective: 01-03 Define and distinguish between open access; private; and common property rights and explain why the assignment of property rights can help reduce pollution.
4.	A common pasture on which anyone is allowed to freely graze sheep or cattle is an example of .
	A. private property rights
	B. an open access resource
	C. common property rights
	D. community property rights
	Accessibility: Keyboard Navigation Difficulty: Eas Field - Chapter 01 #
Learn	ing Objective: 01-03 Define and distinguish between open access; private; and common property rights and explain why the assignment of property rights can help reduce pollution.
5.	The level of pollution can be negotiated privately based on property rights when only a few parties are involved and the source, amount and type of pollution is clearly identifiable.  A. cost-effective
	B. zero-emissions
	C. fair <u>D.</u> socially efficient
	D. socially efficient
	Accessibility: Keyboard Navigation Difficulty: Eas:
Learn	Field - Chapter 01 #3 Field - Chapter 01 #3 ing Objective: 01-03 Define and distinguish between open access: private: and common property rights and explain why the assignment of property rights can

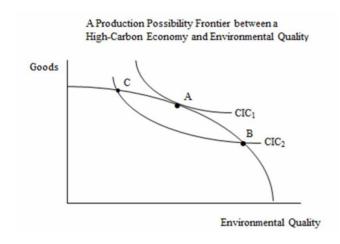
nent of property rights ( help reduce pollution.

6.	When you enjoy the view of your neighbour's prize-winning garden, this is an example of
	A. common property rights  B. a positive externality C. a negative externality D. a public good
	Accessibility: Keyboard Navigation
7.	Difficulty: Easy Field - Chapter 01 #6  Learning Objective: 01-04 Explain why people do not take into account the air pollution their vehicle emits when they drive.  When we drive our cars, we get the of transportation services, while others experience the detrimental effects such as pollution and congestion which environmental economists refer to as a(n)
	A. positive externality; negative externality B. direct benefit; opportunity cost C. direct benefit; negative externality D. positive externality; opportunity cost
	Accessibility: Keyboard Navigation
8.	Difficulty: Easy Field - Chapter 01 #7  Learning Objective: 01-04 Explain why people do not take into account the air pollution their vehicle emits when they drive.  The number of kilometres a household drives its vehicles each year is determined by its of driving.
	A. opportunity cost  B. private cost C. social cost D. external cost
9.	Accessibility: Keyboard Navigation Difficulty: Easy Field - Chapter 01 #8  Learning Objective: 01-04 Explain why people do not take into account the air pollution their vehicle emits when they drive.  Forests, wetlands and oceans are referred to as because of their ability to absorb CO <sub>2</sub> .  A. carbon sources B. carbon stores C. carbon cycles D. carbon sinks
	Accessibility: Keyboard Navigation
	Difficulty: Easy Field - Chapter 01 #9 Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce these emissions.
10.	The largest source of anthropogenic greenhouse gas emissions globally comes from  A. electricity generation and heat  B. transportation  C. agriculture  D. coal mining
	Accessibility: Keyboard Navigation Difficulty: Easy Field - Chapter 01 #10 Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce these emissions.

11.	When considering strategies to mitigate the impact of climate change, the concept that society should consider the trade-off between the cost of preventive measures taken today versus the benefits arising from reduced future risk is known as  A. adaption  B. the precautionary principle
	C. benefit-cost analysis
	D. climate modeling
	Accessibility: Keyboard Navigation Difficulty: Eas Field - Chapter 01 #1. Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce thes
12.	A tax on carbon emissions, standards to improve the energy efficiency of vehicles and appliances and policies that promote solar and wind energy are all examples of  A. the precautionary principle  B. adaption  C. carbon trading  D. greenhouse gas mitigation policies
	Accessibility: Keyboard Navigation
	Difficulty: Eas Field - Chapter 01 #12 Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce thes emissions.
13.	An economy that has the ability to allow the level of people's well-being to rise or at least remain constant over time is  A. sustainable B. equitable C. self-perpetuating D. efficient
	Accessibility: Keyboard Navigatio Difficulty: Eas

Field - Chapter 01 #13
Learning Objective: 01-06 Explain the trade-offs between economic growth and the environment.

In the following figure, the mix of carbon-intensive goods and environmental quality given by \_\_\_\_\_ provides society with the highest possible level of well-being.



### <u>A.</u>

bundle A

В.

bundle B

C.

bundle C

D.

none of the choices are correct

Difficulty: Easy

Field - Chapter 01 #14 Learning Objective: 01-06 Explain the trade-offs between economic growth and the environment.

15. Economic efficiency is the only criterion used by environmental economists to evaluate environmental policies.

#### **FALSE**

In addition to economic efficiency, equity or fairness criteria are also used to assist environmental economists when choosing among policy alternatives.

Accessibility: Keyboard Navigation Difficulty: Easy

Field - Chapter 01 #15

Learning Objective: 01-01 Distinguish between efficiency and equity concepts and why they are central to environmental economics.

16. People make the decision to pollute or not based on the incentives that arise from the set of economic and social institutions under which they find themselves.

#### **TRUE**

Accessibility: Keyboard Navigation Difficulty: Easy Field - Chapter 01 #16 17. Only profit-motivated corporations are responsible for pollution.

#### **FALSE**

Pollution is also caused by individuals, governments and states that do not necessarily operate based on the principal of profit maximization.

Accessibility: Keyboard Navigation Difficulty: Easy Field - Chapter 01 #17

Learning Objective: 01-02 Describe the incentives that contribute to pollution arising from people and firms.

18. Environmental resources generally have well defined property rights.

#### **FALSE**

A lack of property rights underlies many environmental problems.

Accessibility: Keyboard Navigation Difficulty: Easy

Difficulty: Easy Field - Chapter 01 #18

Learning Objective: 01-03 Define and distinguish between open access; private; and common property rights and explain why the assignment of property rights can help reduce pollution.

19. Anthropogenic sources of carbon dioxide include volcanic activity, decaying plant matter and photosynthesis.

**FALSE** 

Accessibility: Keyboard Navigation

Difficulty: Easy

Field - Chapter 01 #19

Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce these emissions.

20. Coal-fired plants are a major source of greenhouse gas emissions in the electricity sector worldwide.

**TRUE** 

Accessibility: Keyboard Navigation

Difficulty: Easy

Field - Chapter 01 #20

Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce these emissions.

21. Climate change models have predicted an increase in the earth's temperature, greater climate variability and more extreme weather events in the 21<sup>st</sup> century if greenhouse gas emissions from human activity continue to be emitted at their current pace.

#### **TRUE**

Accessibility: Keyboard Navigation

Difficulty: Easy

Field - Chapter 01 #21

Learning Objective: 01-05 Describe the anthropogenic sources of greenhouse gas emissions and what changes are needed in the economy to reduce these

22. The production possibility frontier showing the trade-offs between production of high-carbon goods and environmental quality for a certain region never changes.

#### **FALSE**

The PPF for a region can shift inward if the environment degrades over time or it can be shifted outward due to technological advances.

Accessibility: Keyboard Navigation

Difficulty: Easy

Field - Chapter 01 #22

Learning Objective: 01-06 Explain the trade-offs between economic growth and the environment.

23. Assume the natural environment including air, water and land can be used to produce either good A, B or C (but not all). If the value of use is \$50 for good A, \$60 for good B and \$40 for good C, which good should be produced if the decision is based on economic efficiency?

Based on the objective of achieving economic efficiency, good B should be our choice since it maximizes the value of the end use for which resources are being employed.

Difficulty: Easy Field - Chapter 01 #23

Learning Objective: 01-01 Distinguish between efficiency and equity concepts and why they are central to environmental economics.

24. Assume the natural environment including air, water and land can be used to produce either good X, Y or Z (but not all). If the value of use is \$700 for good X, \$600 for good Y and \$400 for good Z, which good should be produced if the decision is based on economic efficiency?

Based on the objective of achieving economic efficiency, good X should be our choice since it maximizes the value of the end use for which resources are being employed.

Difficulty: Easy Field - Chapter 01 #24

Learning Objective: 01-01 Distinguish between efficiency and equity concepts and why they are central to environmental economics.

25. Define the three different types of equity employed in environmental economics to help evaluate economic outcomes.

The three different types of equity employed in environmental economics include horizontal, vertical and intergenerational equity. Horizontal equity considers how people from similar economic circumstances such as rural and urban individuals from the same income bracket are impacted by a policy. Vertical equity considers how people from different economic circumstances such as wealthy and poor individuals living in the same area are impacted by a policy. Finally, intergenerational equity considers how a policy impacts individuals living in the present versus future generations.

Difficulty: Moderate Field - Chapter 01 #25

Learning Objective: 01-01 Distinguish between efficiency and equity concepts and why they are central to environmental economics.

26. List three examples of policies that could be implemented to reduce emissions from household vehicle use and very briefly explain how each would result in lower emissions.

The correct answer could include any three from the following list of policies: 1) charging an annual levy for owning a vehicle (over and above the licence fee) would discourage individuals from owning more than one vehicle; 2) charging individuals a tax based on the number of kilometres driven would cause people to drive less; 3) a tax on gasoline would increase the cost of driving and cause people to drive less; 4) a tax on emissions such as a carbon tax added to the price of gasoline would increase the cost of driving and cause people to drive less; 5) a program offering to buy old vehicles would lower the average age of the fleet resulting in lower emissions; 6) advertising and education programs can encourage people to change their driving habits such as taking public transportation more often, carpooling, etc.

Difficulty: Easy Field - Chapter 01 #26

# Chapter 1 Summary

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Learning Objective: 01-03 Define and distinguish between open access; private; and common property rights and explain why the assignment of property rights can help reduce pollution.	4
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