

Example Items

Environmental Systems

Environmental Systems Example Items are a **representative set** of items for the ACP. Teachers may use this set of items along with the test blueprint as guides to prepare students for the ACP. On the last page, the correct answer, content SE and SE justification are listed for each item.

*The specific part of an SE that an Example Item measures is **NOT** necessarily the only part of the SE that is assessed on the ACP.* None of these Example Items will appear on the ACP.

Teachers may provide feedback regarding Example Items.

(1) Download the [Example Feedback Form](#) and email it. The form is located on the homepage of the [Assessment website](https://assessment.dallasisd.org): <https://assessment.dallasisd.org>.

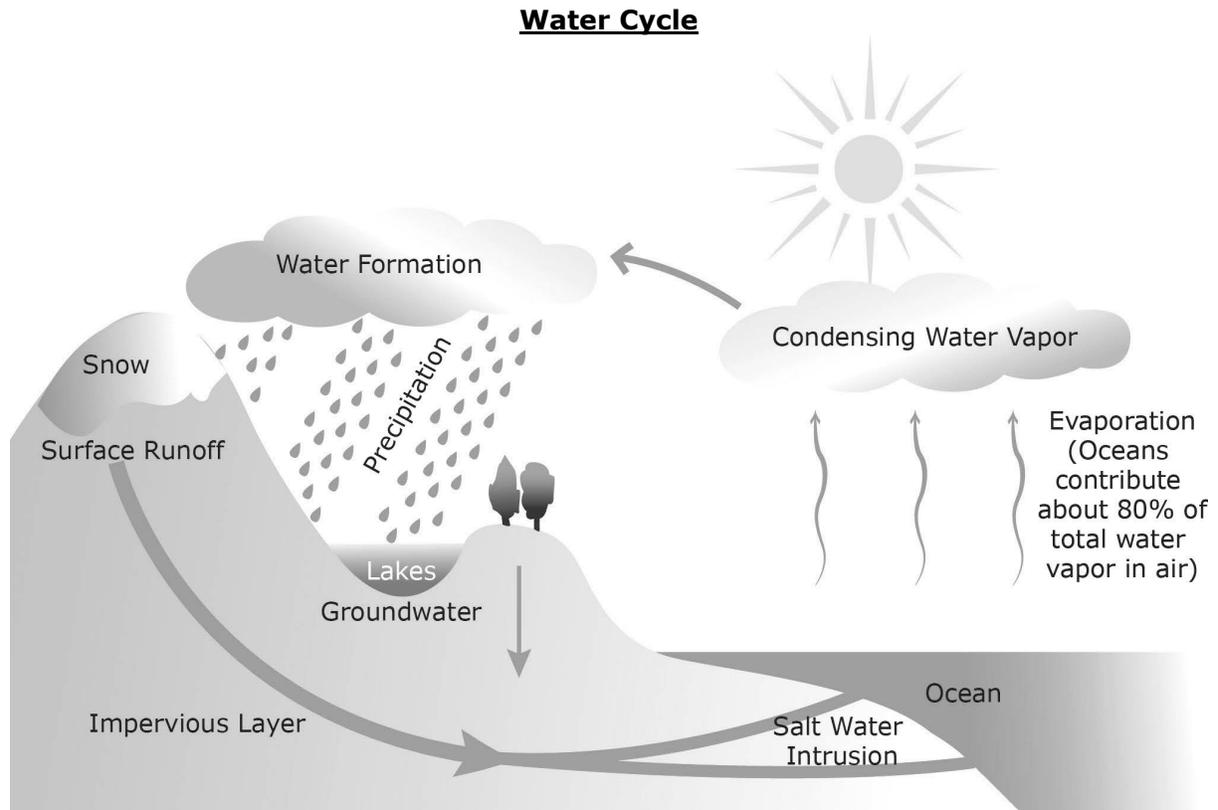
OR

(2) To submit directly, click “Example Feedback – online form” **after** you click the Example Items link under ACP Resources on the ACP tab on the [Assessment website](#).

First Semester
2020–2021
Code #: 3121

EXAMPLE ITEMS Environmental Systems, Sem 1

- 1 Water moves between the atmosphere and the Earth. In this process, water is used and reused as illustrated.



What provides the energy that drives the water cycle?

- A The Sun
 - B The ocean currents
 - C The Earth's heat
 - D Precipitation
- 2 Legislation in California has established laws to ensure that the construction of new buildings is sufficient to withstand earthquakes by using earthquake-resistant structures. What made these new laws reasonable?
- A Probability
 - B Survivors
 - C Statistics
 - D Technology

EXAMPLE ITEMS Environmental Systems, Sem 1

3 What accounts for the largest consumptive use of water?

- A** Recreation
- B** Agriculture
- C** Residential
- D** Industrial

4 There are many ways individuals can reduce their energy use inside and outside the home. Which activity will help conserve nonrenewable energy sources?

- A** Using appliances powered by solar energy
- B** Using nuclear energy to power homes
- C** Producing more materials made from plastic
- D** Locating new oil fields

5 As a wilderness area, Isle Royale has many dynamic interactions among its natural resources. Wolves keep moose populations from overgrazing, and beavers provide dams that in turn increase the aquatic vegetation upon which moose feed. Beavers also serve as summer food for wolves, and beaver ponds eventually become meadows, supporting a variety of smaller animals. The red fox eats hares that, left unchecked, would consume the vegetation that supports the moose that support the wolves.

Which organisms mentioned in the passage are secondary consumers?

- A** Beavers and hares
- B** Red foxes and wolves
- C** Hares and moose
- D** Wolves and beavers

6 If a grassland suffers severe drought as a result of temperature increases and a decrease in precipitation over a long period of time, which biome does it most closely resemble?

- A** Savanna
- B** Tundra
- C** Desert
- D** Woodland

EXAMPLE ITEMS Environmental Systems, Sem 1

7 In areas of Africa, ranchers are making more money managing native species of wildlife rather than raising cattle. Allowing visitors to view the native wildlife is an example of —

- A** captive breeding
- B** ecotourism
- C** artificial selection
- D** habitat restoration

8 A scientist uses a dichotomous key to identify two bean samples.

Bean Sample 1



Bean Sample 2



Dichotomous Key	
1	a. Bean is roundGarbanzo b. Bean is elliptical or oblonggo to 2
2	a. Bean is white Great Northern b. Bean has dark pigments go to 3
3	a. Bean is evenly pigmented go to 4 b. Bean pigmentation is mottled Pinto
4	a. Bean is black Black Turtle b. Bean is reddish-brown Kidney

What are the names of the beans in samples 1 and 2?

- A** Sample 1 Garbanzo
Sample 2 Pinto
- B** Sample 1 Great Northern
Sample 2 Kidney
- C** Sample 1 Pinto
Sample 2 Black Turtle
- D** Sample 1 Kidney
Sample 2 Black Turtle

EXAMPLE ITEMS Environmental Systems, Sem 1

- 9** Which type of heat transfer allows heat to travel through space, so that the Sun warms the Earth?
- A** Conduction
 - B** Convection
 - C** Radiation
 - D** Reflection
- 10** When wildfires burn trees, the barren soil becomes more susceptible to erosion. This highly eroded soil gets washed into streams, where it kills aquatic organisms. Which of Earth's spheres are involved in these interactions?
- A** Biosphere, lithosphere, and hydrosphere
 - B** Lithosphere, atmosphere, and hydrosphere
 - C** Hydrosphere, stratosphere, and biosphere
 - D** Troposphere, lithosphere, and hydrosphere
- 11** To increase soil fertility and production, farmers —
- A** strip the land of vegetation before plowing
 - B** monocrop year after year
 - C** plow in the direction of the slope
 - D** rotate a variety of crops
- 12** Which statement describes the waste management method known as source reduction?
- A** Taking materials to a facility for the processing and creation of new ones.
 - B** Using food scraps and yard waste to create humus that can enrich the soil.
 - C** Buying products that can be used repeatedly instead of disposable ones.
 - D** Burning waste in a facility, thus decreasing the amount of waste that goes into landfills.

EXAMPLE ITEMS Environmental Systems, Sem 1



Use the table to answer the next question.

Renewable Energy Source	Advantage	Disadvantage
Hydroelectricity	Hydroelectric dams last longer than fossil fuel power plants and are cheaper to operate.	The dam can change a river's floor, affecting animals living downstream.
Wind	Land used to collect wind energy can also be used for other purposes.	The cost of wind turbines continues to increase.
Solar	Solar cells require only a very small amount of land area.	Solar cells produce a very small amount of electrical current.
Biomass	Biomass can be used as an energy source in developing countries.	Biomass resources are often nonrenewable.

13 Which renewable energy source is correctly paired with an advantage and a disadvantage?

- A Hydroelectricity
- B Wind
- C Solar
- D Biomass

14 Egyptian fruit bats play a key role in the reproduction of fruit trees by dispersing the seeds of the fruits they eat. Which animal has a similar role within its native biome?

- A Ringtail cat in the Grand Canyon
- B Chimpanzee in African rainforests
- C Mexican wood rat along the Rio Grande
- D North American beaver in Canada

EXAMPLE ITEMS Environmental Systems, Sem 1

- 15** A city located in the Midwestern United States is having difficulties with its renewable energy program due to a prolonged period of poor weather. Officials decide to find a nonrenewable resource from outside their city to supplement the program. Which action best accomplishes their goal?
- A** Import energy from solar panels used in a city that gets more sun
 - B** Set up wind turbines in an open area outside the city limits
 - C** Set up a coal mining operation within the city limits
 - D** Import natural gas from offshore drilling operations
- 16** What are the ecological benefits of cities developing air quality control laws?
- A** Ozone layer thinning
 - B** Renewable resource shortage
 - C** Greenhouse gas reduction
 - D** Increased acid precipitation

EXAMPLE ITEMS Environmental Systems Key, Sem 1

Item#	Key	SE	Process Skills	SE Justification
1	A	E.4C	2I	Diagram abiotic cycles, including the...hydrologic...cycle...
2	D	E.9I	--	Discuss the impact of research and technology on...legal practices in...the design of new buildings...
3	B	E.5B	--	Identify...use[s]...of water
4	A	E.5C	--	Document the...conservation of...nonrenewable resources...
5	B	E.6E	--	...Identify energy interactions in an ecosystem
6	C	E.4D	--	...Evaluate the effects of abiotic factors on local biomes
7	B	E.9E	--	Evaluate the effect of human activities, including...ecotourism...on the environment
8	D	E.4A	--	Identify native plants...using a dichotomous key
9	C	E.6C	--	Explain the flow of energy in an ecosystem, including...radiation
10	A	E.6A	--	Define and identify the components of the geosphere, hydrosphere,...and biosphere and the interactions among
11	D	E.5A	--	Summarize methods of land use and management and describe its effects on land fertility
12	C	E.5F	--	Evaluate the impact of waste management methods such as reduction...
13	A	E.6B	2I	Describe...renewable...energy derived from natural sources...such as...solar,...hydroelectric, and wind
14	B	E.4B	--	Assess the role of native...animals within a local ecosystem and compare them to...animals in ecosystems within...other biomes
15	D	E.5D	--	Identify renewable and non-renewable resources that must come from outside an ecosystem such as...energy
16	C	E.9F	--	Evaluate cost-benefit trade-offs of commercial activities such as municipal development