Unit 1

Environment
# Word Form Chart

<table>
<thead>
<tr>
<th>Noun</th>
<th>Verb</th>
<th>Adjective</th>
<th>Adverb</th>
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Definitions and Examples of Word Forms

1. **conserve**, v.t., to protect and keep from being wasted or overused

   With about 6.7 billion people on Earth, it is important to conserve water so there is still clean water for the future.

   When gasoline prices are very high, more people think about the conservation (n.) of resources and drive less.

2. **contaminate**, v.t., to make something impure, to pollute something

   Chemical companies have contaminated rivers by pouring wastewater into the rivers.

   Oil tankers that crash and spill oil in the ocean cause a lot of contamination (n.).
   As a result, lots of birds and fish die.

3. **gloomy**, adj., depressing, negative, without hope

   Some people think that, because of global warming, the future of the environment is gloomy.

   More and more people have a sense of gloom (n.) and doom when it comes to the future of the environment.

4. **isolate**, v.t., cause someone or something to be alone, apart from others

   Lots of useful substances can be isolated from parts of plants that may be disappearing.

   When an animal is removed from its natural environment, the isolation (n.) can cause depression.
phenomenon, n., a fact or event that can be observed, often something that is extraordinary, incredible, or amazing

Scientists can split the hydrogen from the oxygen in water and use it as a fuel source. This phenomenon may soon be very useful as an alternative to fossil fuel.

Iceland has done a phenomenal (adj.) job of finding and using renewable and pollution-free energy sources.

potential, n., having abilities that could be developed for success or usefulness in the future

If humans can send people to the moon and Mars, don’t we have the potential to develop sources of energy that are renewable and clean?

If city governments invested in improved public transportation systems and people used them, we could potentially (adv.) reduce by the thousands the number of cars driven every day in every city.

rescue, v.t., save someone or something from a dangerous or undesired situation

Fortunately, no people or animals died in last week’s flood because emergency workers were able to rescue everyone.

Morgantown wanted to start a clean energy program, but it didn’t have enough money; luckily, a wealthy citizen came to the rescue (n.) and provided the necessary funding.
8. resource, n., a supply of whatever is needed to perform a task

Countries like the United States and Brazil are very interested in ethanol made from corn or sugar cane because plants, unlike coal and oil, are a renewable resource.

If we could find ways to resource (v.t.) the Sun's energy, we could provide people with power for a long time.

9. rugged, adj., land that is difficult or rough

Mountain climbers who climbed K2 mountain on the border of Pakistan and China expected a very rugged climb, but they did not expect 11 people in their group to die.

The ruggedness (n.) of the frozen environment in Antarctica can make working there very difficult.

10. sanitary, adj., conditions that are clean and healthy

Because we come into contact with a lot of germs every day, it is a good sanitary measure to wash your hands before eating.

Some people don't like to camp because they feel they can't sanitize (v.t.) the dishes like they do at home.

11. spill, v.t., cause or let a liquid go outside of its container

Jethro spilled paint, and it killed the plants nearby.

Oil spills (n.) are very expensive to clean up and cause great damage to the environment.
12. **stable**, adj., not changing or failing, firmly established

   If a bird population that was stable shows a great increase or decrease in the population, it is a sign of some change in its environment.

   Once it seemed that Earth would stay the same forever. Now, with big environmental problems like global warming, our stability (n.) seems less certain.

13. **substitute**, v.t., to use or add something or someone in place of another

   Some people believe the solution to the fuel problem is to substitute solar energy for oil and coal.

   Plants are the major source of oxygen in our environment; there is no substitute (n.) for them.

14. **territory**, n., an animal’s or human’s living area

   The size of an animal’s territory is, in part, determined by the amount of food and water in the space.

   Male lions are territorial (adj.) and fight other male lions that try to take their space.

15. **visible**, adj., able to be seen; the distance one can see, especially as a result of weather conditions

   In some areas of the world, autumn makes very visible changes in the environment, such as trees losing all their leaves.

   In bad weather, air flights may be delayed due to low visibility (n.).

16. **wind**, n., movement of air

   The wind blows plant seeds from one place to another, which allows plants to reproduce.

   It was really windy (adj.), even hours before the hurricane struck.
Vocabulary Practice

A. Match Point

Write the letter of the best definition next to each word. The first one has been done as an example.

1. **b** conserve  
   - a. depressing, hopeless

2. ____ gloomy  
   - X keep from being wasted

3. ____ isolated  
   - c. lots of movement of air

4. ____ spill  
   - d. area where an animal lives and hunts

5. ____ windy  
   - e. rough and rocky

6. ____ phenomenon  
   - f. an observable event

7. ____ rugged  
   - g. apart from others, alone

8. ____ rescue  
   - h. to save someone from a disaster

9. ____ territory  
   - i. to let liquid out of its container
B. Switch It Up

Each sentence contains an incorrect form of the underlined vocabulary word. Write the appropriate form of the word in the blank. The first one has been done as an example.

1. **territory** The “Grand Canyon” of Pennsylvania is a **territorial** of 47 miles.

2. ________________ Sometimes the future of our planet seems **gloomily**.

3. ________________ Amal says she would like to leave the city for a small village, but I think she would feel too **isolation**.

4. ________________ Immediately after the tornado hit, **rescuer** teams were sent to help people.

5. ________________ Sometimes in the early morning when there is a lot of fog, **visible** is limited.

6. ________________ The Sun and clean water are two of our most important **resourcefulness**.

7. ________________ Because so many people have been doing their washing in the river for so long, the river is not very **sanitation**.

8. ________________ The **windy** carries seeds from plants and trees, and the seeds grow where they fall.
C. Fill It In

Read each paragraph and choose the correct word from the word bank for each blank space. The first one has been done as an example.

<table>
<thead>
<tr>
<th>rescue</th>
<th>contaminating</th>
<th>resources</th>
<th>resources</th>
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<tbody>
<tr>
<td>isolated</td>
<td>invisible</td>
<td>phenomenal</td>
<td>unsanitary</td>
<td>conservation</td>
</tr>
</tbody>
</table>

1. Frederick drives big cars because he has a lot of financial ________ **resources** _______ and he likes the luxury they provide. The problem is that ________ **invisible** _______ fossil fuels pollute the environment.

2. Modern societies have ________________ technology. Because we can now transport goods by land, air, and sea, even small countries are not ________________ and can get almost anything they want. Nevertheless, natural ________________ should be taken care of.

3. The local government fought against a powerful chemical company that was ________________ the river. Not only was it creating ________________ conditions for humans, it was also hurting the fragile ecosystem of the river. However, the company claimed it was just an accidental chemical ________________ and that they would work on a plan to ________________ the plants and species affected.
D. What’s the Word?

With your partner, fill in each box on the grid. Student A will use Grid A. Student B will use Grid B in Appendix 1 on page 165. Each grid is missing different words. Describe the words on your grid so your partner can fill in his or her blank spaces. When all of the blanks are full, compare your grids to see if you have the correct answers.

**Example:** For Box 1, Student A could give Student B these clues: *It’s a verb; to save something. It is often used with energy or natural resources.*

**Grid A**

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<tr>
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<td>4</td>
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<td>18</td>
<td>gloomy</td>
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Frequent Collocations: Environment

**Collocations** are fixed expressions that are frequently used by native speakers. Knowing which words are frequently used together is important because your sentence may sound awkward if the wrong words are used together.

**Correct:** crystal clear, middle management, nuclear family, cosmetic surgery

**Incorrect:** diamond clear, middle supervisor, restricted family, cosmetic operation

Some common environment collocations are listed. What others can you think of?

1. **conserve**—to conserve energy, to conserve resources, wildlife conservation, wildlife and conservation area
2. **phenomenon**—global phenomenon, natural phenomenon, strange phenomenon, to observe a phenomenon
3. **potential**—to develop one’s potential, to exploit the potential of, to have potential, to reach one’s full potential, potential benefits, potential impact
4. **rescue**—animal rescue, rescue operation, rescue workers, search and rescue team, to come to someone’s rescue
5. **resource**—lack of resources, natural resources, resource allocation, resource management, a valuable resource, to pool resources
6. **rugged**—rugged coast, rugged mountains, rugged terrain, rough and rugged
7. **spill**—an oil spill, to accidentally spill, to spill over
8. **stable**—to be relatively stable, to provide stability, to remain stable
9. **territory**—to be in one’s territory, to be in uncharted territory, to be in (un)familiar territory, to chart new territory
10. **wind**—(solar and) wind power, wind and rain, wind chill factor, to be/go against the wind, gale force winds, gusts of wind
E. Pick One Out

Match the word in the shaded column with the word or phrase on the same line on the right that often goes with it. Circle your answer. The first one has been done as an example.

<table>
<thead>
<tr>
<th>1. potential</th>
<th><strong>benefits</strong></th>
<th>troubles</th>
<th>animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. stability</td>
<td>take</td>
<td>lean</td>
<td>provide</td>
</tr>
<tr>
<td>3. wind</td>
<td>and snow</td>
<td>and rain</td>
<td>and sun</td>
</tr>
<tr>
<td>4. rugged</td>
<td>terrain</td>
<td>silk</td>
<td>world</td>
</tr>
<tr>
<td>5. resources</td>
<td>natural</td>
<td>strong</td>
<td>mountain</td>
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<td>6. rescue</td>
<td>development</td>
<td>operation</td>
<td>state</td>
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<td>7. phenomenon</td>
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<td>8. conserve</td>
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<tr>
<td>9. territory</td>
<td>familiar</td>
<td>strong</td>
<td>isolation</td>
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</tbody>
</table>
F. Get It Together

Unscramble the words and phrases to write sentences containing the collocations. The first one has been done as an example.

1. Wildlife / may not be / on the agenda of / very high / conservation / developing countries

   **Wildlife conservation may not be very high on the agenda of developing countries.**

2. like hurricanes / phenomena / are changing their nature / global warming / Global / because of

3. in sea levels / has yet to be assessed / The potential / of the rise / impact

4. due to increasing temperatures / need to be ready / for more avalanches / rescue teams / in the mountains / Search and
5. California's Big Sur / the rugged / I have always loved / coast of

6. may remain / Our local ecosystem / stable / are constructed / if no more buildings

7. they could / in the gorillas' / Once you are / territory / become aggressive

8. even colder / because of / The below-freezing temperatures / the gusts of / seemed / wind
Practice Quiz

G. The Choice Is Yours

Circle the best answer.

1. An example of a natural phenomenon is a ____.
   a. country highway
   b. cellular telephone
   c. long river
   d. damaged oil tanker

2. A contaminant ____.
   a. is an improvement
   b. is acceptable
   c. comes from any big company
   d. is usually harmful

3. Many animals living in one small territory might lead them to ____.
   a. share food
   b. fight over food resources
   c. share space
   d. eat different foods
4. With a degree in environmental biology, Xiwei has the potential to ____.
   a. protect natural resources
   b. teach mathematics
   c. work as a doctor
   d. program computers

5. Animals that are geographically isolated are ____.
   a. more important than other animals
   b. connected to other animals
   c. separated from other animals
   d. similar to other animals

6. Stable communities ____.
   a. don’t change much
   b. are fragile
   c. don’t have many members
   d. are unbalanced
7. Urban gardens are an eco-friendly idea for people who live in the ____.
   a. suburbs
   b. hospital
   c. country
   d. city

8. Extreme winds are characteristic of ____.
   a. dry spells
   b. typhoons
   c. floods
   d. earthquakes
H. Sense or Nonsense?

Using your knowledge of the unit’s target vocabulary, write Y (yes) for statements that make sense or N (no) for statements that do not make sense.

1. ____ Tram leaves the water running while he brushes his teeth because he is trying to conserve water.

2. ____ Hye-won is happy to see that the Pittsburgh parks still exist and that the green spaces have been conserved.

3. ____ The Yamuna River in India is full of waste and garbage, so people can easily get sick from the unsanitary conditions.

4. ____ The Albemarle Sound is a stable environment because of the chemicals that run off into it that make the plants in the water grow too fast.

5. ____ José Luís won’t change his wasteful behavior because the damage to the environment is not clearly visible.

6. ____ Spills are one potential problem related to drilling for oil or transporting oil by ship.

7. ____ We have an endless supply of natural resources in the world—oil, coal, and fresh water.

8. ____ Living and working in a rugged environment is easy for Cecilia because she loves luxury.

9. ____ Because of all the concerns about the environment like global warming and deforestation, Jake has a gloomy outlook about the future.

10. ____ People who rescue animals during a natural disaster want the animals to stay in the dangerous situation.