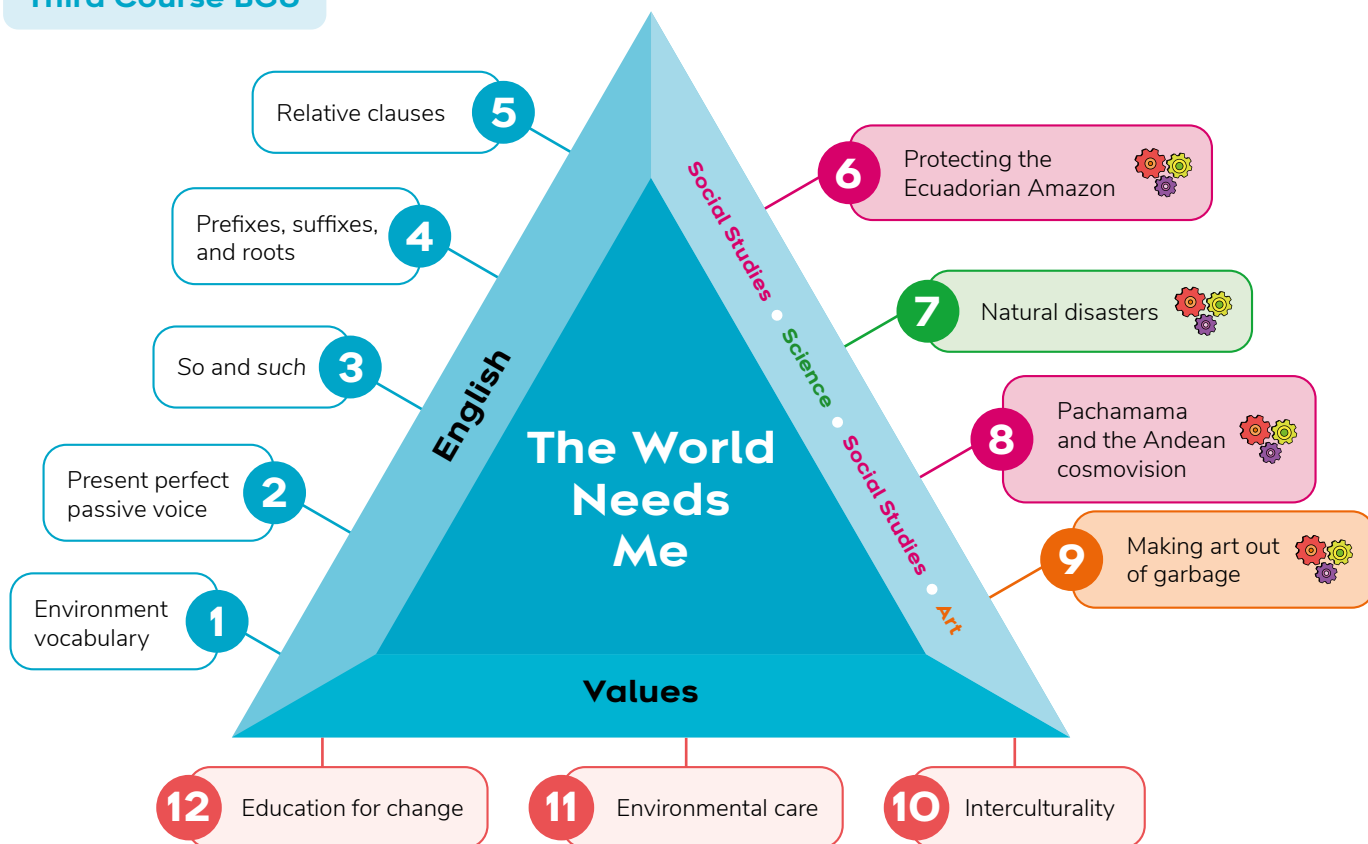


English Pedagogical Module 3

How is our planet doing?

Curricular Threads: Communication and Cultural Awareness,
Oral Communication, Reading, Writing, Language Through the Arts

Third Course BGU



The Time Is Now



The planet is getting hotter, the ice caps are melting, there are more and more natural disasters like hurricanes and earthquakes...

Maybe the environment is urgently trying to tell us something. Some people say that the end of the world is coming soon, and that we humans are the cause of it. We certainly have a lot of responsibility to our planet, Mother Earth. Without the conditions that are unique to this planet, like oxygen and water, we as a species could not survive. Robert Swan, the first person to walk on the North and South poles, said: "The greatest threat to our planet is the belief that someone else will save it." If not us, who?



- What do you think about what Robert Swan says? What does he mean? Do you agree?
- On a scale of 1 to 10, 1 being nothing and 10 being a lot, how much do you think your community is doing to help our environment? Why do you say that?

Communication and Cultural Awareness



Social Studies

What do you know about the Ecuadorian Amazon?

Culture

In the Amazon region of Ecuador, there are nine different indigenous nationalities: Kichwa, Shuar, Achuar, Shiwiar, Cofán, Siona, Secoya, Zápara, Andoa, and Waorani. They speak different languages and have different customs. Most of these nationalities welcome thousands of international tourists every year.



Protecting the Ecuadorian Amazon

The Amazon region of Ecuador is found in the eastern part of the country. Of the four geographical regions of the country (Amazon, Highlands, Coast, and Galapagos), it is the largest in area. It is one of the most biodiverse places on the planet, with thousands of species of plants and animals. It is a natural treasure for the country and the world. There are five national parks in this region: *Yasuni*, *Cayambe-Coca*, *Llanganates*, *Sumaco Napo-Galeras*, and *Río Negro-Sopladora*.

This beautiful region is in danger. There is a lot of oil (near 800 million barrels) in the ground of the Ecuadorian Amazon. If oil companies remove this oil from the **ground**, the ecosystem will be **disturbed**. It can **harm** the plants and animals. Some indigenous groups of the region, especially the Waorani, have fought and won important legal battles to preserve the land. But this fight is far from finished. There are constant **attempts** by oil companies to **drill** in the region. There are also instances of illegal deforestation in the region. As long as there continues to be strong opposition to this, there is hope that the Amazon region of Ecuador will remain protected.

Adapted from: <https://bit.ly/2z6100i>



Answer the following questions in small groups. Write down what you discuss.

- According to the reading, what is special about the Amazon region?

- What are the two sides of the oil debate? What do oil companies want? What do the indigenous people want?

- Have you heard any news recently about this topic? Share it.

- What is your own personal opinion? Should the oil companies be able to drill for oil in order to make money, or should the Amazon be protected? Defend your opinion with solid arguments.



Vocabulary

ground. Earth's solid surface

disturbed. changed in an unwanted way

harm. damage, hurt

attempt. an effort to do something

drill. make a hole in something

Oral Communication

Do you believe trees have any special powers? What are they?
Have you heard about the power of hugs? What benefits do you think hugging has?

Hug a Tree!



Interesting Fact

Our brains release hormones as a reaction to many different situations. These can make us feel better, like in the case of hugging trees, or make us feel anger or ready to fight. These are natural, physiological reactions that our bodies produce as a response to a stimulus.

Listen to someone talk about tree hugging and decide if each of the statements below are **True (T)** or **False (F)**.

- Hugging a tree doesn't have many health benefits. ☐ T ☐ F
- Depression can be reduced by hugging a tree. ☐ T ☐ F
- Children only see cognitive benefits when they hug a tree. ☐ T ☐ F
- There are three hormones involved when you hug a tree. ☐ T ☐ F
- Hugging trees is a good way to reduce stress. ☐ T ☐ F

Tip

In this recording, we can hear the person use the second-person singular pronoun "you" often. This is called the generic, impersonal, or indefinite "you". It is used to refer to an unspecified person. In this case, it brings the listener closer to the words the person is speaking.

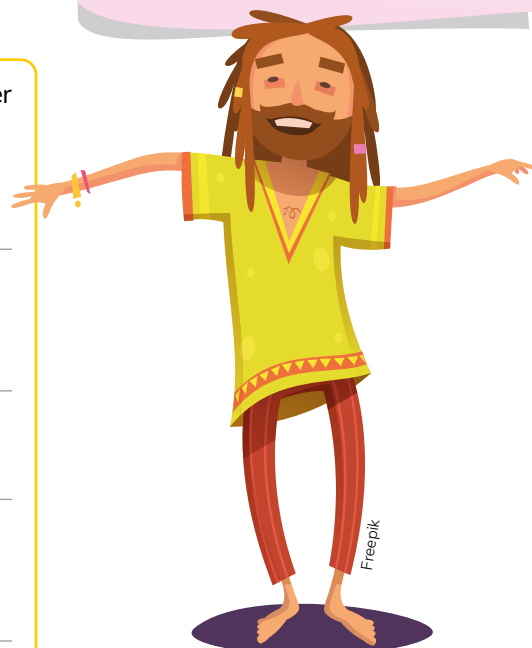
Listen to the recording again. Reflect on the questions below. Answer them in complete sentences, then share your answers as a class.

- Do most of you agree?

- Do you believe what the person says about the benefits of hugging trees? Why or why not?

- How can people determine the effects of something like hugging trees?

- Do you personally interact with nature in any other ways that help you to feel better? What are they?



Reading



Science

What are some natural disasters you know? Who or what do you think causes them?

Natural Disasters in Ecuador

There are different types of natural disasters that occur in Ecuador; one is an earthquake. An earthquake happens when the plates of the earth move against each other. Hundreds of earthquakes **have been recorded** in Ecuador. The strongest earthquake in the country that has been measured was on December 12, 1979. It happened in the Pacific Ocean on the border between Ecuador and Colombia and measured 8.2 on the Richter scale. It caused a tsunami, which is another type of natural disaster. It is a long high wave that can cause a lot of destruction.

Volcanic eruptions are another type of natural disaster. In Ecuador, including the Galapagos Islands, 27 potentially active volcanoes **have been counted**. Some of the most famous of these are the Cotopaxi, Reventador, Cayambe, and Tungurahua. Volcanoes can be erupting, active, dormant (not active but may be in the future), or extinct (has not erupted in over 10,000 years). The state of Ecuador's volcanoes **has been monitored** for decades.

Wildfires are also a natural disaster that occur in Ecuador. During the past few years, more and more wildfires **have been registered**, especially during the summer months of June, July, and August in the highlands. Many acres of land **have been burned**. When the weather is dry and warm, wildfires are more likely to occur. We have to be careful because with these conditions, fires can spread quickly and destroy a lot of land.

Grammar Note

Notice the words in green. This is the **present perfect passive voice**. It is used when the emphasis is on the action and not necessarily who did it and for an event that has happened in a time frame that includes the present.

It is formed: **has/have (not) + been + past participle**

The problem with air pollution **has not been solved**.

Have recycling containers **been installed** throughout the city?



Tungurahua volcano

Organize the information from the reading about natural disasters in Ecuador. List the four types of natural disasters mentioned in the meeting and write notes about each one. When you write notes, it is not necessary to write complete sentences. Use your own words.

Natural disaster	Details about each one
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____

Using the present perfect passive voice, write three sentences about things that have been done in your community that affect the environment, either positively or negatively.

Example: Garbage cans **have been installed** at every street corner.

Write them in your notebook.

Writing

What should we do about the Ecuadorian Amazon?

An Opinion Paragraph for a Newspaper



Tip

Remember to use connecting words to make your paragraph flow better. Some words used to connect similar ideas are: *in addition, furthermore, moreover*. Some words used to oppose ideas are: *however, on the other hand, nevertheless*.

Step 1

After having read about the situation with the Ecuadorian Amazon and petroleum it has, what is your opinion? Are you in favor of or against drilling for oil there? Mark one:

_____ in favor _____ against

Step 2

Now, think of three supporting reasons why you have that opinion. Two should be your own arguments for your position, and one should be a counterargument to something the other side would say. For example, if the topic is school uniforms and you are against them, you have to think of something that someone who is in favor of school uniforms would argue, to then counter their argument. Someone in favor of them may say: "School uniforms help all students to look the same, no one is judged." You can then say: "But school uniforms take away self-expression through your clothes."

Write your arguments here:

Argument 1: _____

Argument 2: _____

Argument 3: The other side of the debate might say _____

_____, but _____
(your counterargument).

Step 3

Write a paragraph of 60-75 words in your notebook. Your first sentence should clearly state your opinion. The next 3-5 sentences should be your arguments. Finally, you should write a concluding sentence that reinforces your opinion.



Tip

When writing your opinion, it is not necessary to use phrases like "I think", "I believe", or "My opinion is". We can assume that since you are the author, what you write is what you believe. These phrases weaken your opinion.

Language Through the Arts

Have you been to a beach before? Which one? Did you think it was clean or dirty?

Culture

There are indigenous people in Ecuador, but also in many other parts of the world. These are the descendants of the original inhabitants of the land, before the arrival of explorers from other countries. Some of them still preserve the traditions of their ancestors.



Ghost Nets

Just outside of the small Australian ocean town called Pormpuraaw, the indigenous people of the area, called aborigines, have **come up with** a great idea. Recently, they noticed that huge fishing nets were appearing on the shore. They are called “ghost nets”, because they are thrown into the ocean, they float like ghosts, and trap and kill a lot of marine life.

The aborigines started to collect these nets that they found on the shore. Then, they began to gather **rubber**, plastic, and metal pieces. They took the nets and the pieces of **debris** and **arranged** them into works of art. They make different figures that represent sea life or other animals. The finished art sells for up to \$15,000. 65% of the **profits** go to the artist, and 35% goes to the art center in the town.

The aborigines of Pormpuraaw not only hope to make money from their art. They also want to raise **awareness** about how we treat our environment, especially our oceans and marine life. We need to pay attention to the effects our actions as humans have on the environment and take care of our home.

Adapted from: <https://bit.ly/35CBHj7>

Vocabulary

come up with. invent, discover

rubber. a material used to make tires, for example

debris. pieces of garbage or waste

arrange. fix, put together

profit. money earned from selling something

awareness. consciousness



Imagine that you are one of the aborigine artists from the reading. Using the same materials they use, draw a picture of a net sculpture that you would create. Remember that the idea is to raise awareness about environmental issues. Under your drawing, explain why you decided to create that particular figure.

Oral Communication

Do you know anyone who takes care of the environment? Who is this person?

Listen to the person talk about important environmentalists, people who dedicate their lives to helping our planet. Then fill in the chart with the missing information.

Name	Country of origin	Important contributions to our planet
Malaika Vaz		
Hans Cosmas Ngoteya		
Bertie Gregory		
Alyssa Adler		
David Lama		
Antonella Wilby		

Tip

Remember that when we talk about where a person is from, we can use the name of the country or the adjective. Both take capital letters in English.

Paul Watson is an environmental activist from Canada. He is Canadian.

Vandana Shiva is an environmental scholar from India. She is Indian.



Listen to the recording again. Reflect on the contributions of these young people and discuss the following questions as a class.

- Do you think these young people are really making a difference in the environment? How?
- Do you know of any young people in your country making a difference like this? Do you think you could do it?
- Which of the young activists seem the most interesting to you? Why?

Communication and Cultural Awareness



Social Studies

Have you heard of the term *Pachamama*? Do you know what it means?



Machu Picchu Ruins

The *Pachamama* is usually translated into English as “Mother Earth”, although the more literal translation would be “World Mother”. She is an Andean indigenous **goddess**. She is **worshipped** in the region of Tawantinsuyu, the former Incan Empire, which now includes the Andean regions of Ecuador, Bolivia, Chile, Peru, and northern Argentina.

In Incan mythology, she presides over planting and **harvesting** crops and can cause earthquakes. She is also the goddess of fertility. In the Quechua cosmovision, the four principles – Water, Earth, Sun, and Moon – come from her. She is the mother of the Sun god Inti, and the Moon goddess Mama Killa. She is offered many sacrifices, especially animals like llamas and alpacas. Rituals to honor her are celebrated all year, but especially in August, which is the coldest month of the year in the southern Andes.

With the arrival of the Spaniards, in some regions of the Andes, the *Pachamama* was replaced by the Virgin Mary. But those who believe in the *Pachamama* can maintain a balanced, **reciprocal** relationship with her. It is said that if people treat the *Pachamama* well and offer her the best sacrifices, then she in return will give them a good harvest.

Adapted from: <https://bit.ly/2yCMvS7>

Answer the following questions in complete sentences based on the reading.

1. What is the most common translation for *Pachamama* in English?

2. What powers does the *Pachamama* have?

3. What do people offer to the *Pachamama*?

4. How do people maintain a good relationship with the *Pachamama*?

From the description of the *Pachamama* given in the text, draw what you think she would look like in the box. Be prepared to describe your drawing out loud to the class.



Vocabulary

goddess. female god

worshipped. venerated, revered

harvesting. collecting fruits and vegetables to be eaten when they are ready

reciprocal. works in both directions, for each other

Oral Communication

What do you do with food you don't finish? Do you think that you could do something different?

How to Make a Compost Bin



Listen to someone talk about how to compost. Imagine you want to share the information with your own community. Complete the following flyer that explains how to do it.

How to Make a Compost Bin

Composting is making organic matter (1) _____ to be able to use it as (2) _____ fertilizer.

You can do this in your own (3) _____ ! It's easy!

First, you need to get a (4) _____. The best material is (5) _____.

Then, you need to make 8-10 (6) _____ in the bottom.

Put pieces of newspaper or (7) _____ at the bottom.

Then add (8) _____. Then you can put organic material like fruit and vegetable waste and other similar items.

Wet it with water, then (9) _____ it. You can also add (10) _____ to help with the decomposition process.

Culture

Think of what happens to the fruits and vegetables that fall off plants. They fall to the ground and naturally start to decompose in their environment! A compost bin helps organic waste to do the same.



Vocabulary

decompose. organic material that breaks down

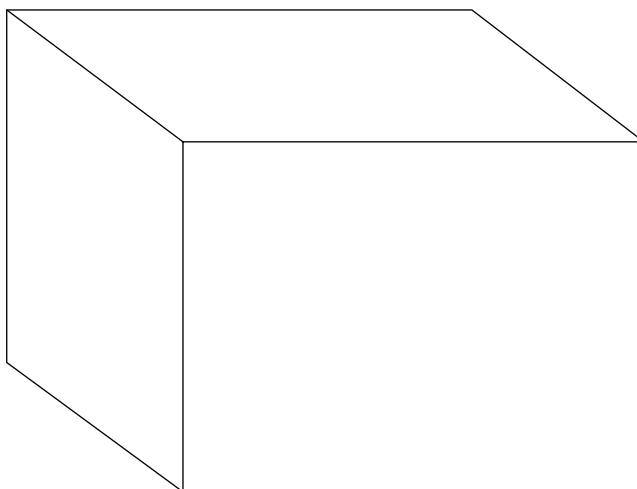
fertilizer. product to put in the soil to help plants grow healthier

peels. the outside part of a fruit or vegetable

worms. small, soft, invertebrate animals that live in the ground



Listen to the recording again. Draw a diagram that goes along with your instructions. Label each part of the compost bin.



Language Through the Arts

Do you know any songs that are about our planet?

Culture

Michael Jackson (1958-2009) was an American singer, songwriter, and dancer. He was a very influential figure in pop music in the late 20th century. He is one of the best-selling music artists of all time, selling over 350 million records worldwide. His legacy will live on forever.



“The Earth Song”

by Michael Jackson

Read the lyrics from “The Earth Song” by Michael Jackson.
What is the message?

What about sunrise, what about rain
What about all the things that you said we were to gain
What about killing fields, is there a time
What about all the things that you said were yours and mine

Did you ever stop to notice all the blood we’ve **shed** before
Did you ever stop to notice this crying Earth, these **weeping** shores...

What have we done to the world, look what we’ve done

What about all the peace that you pledge your only son
What about flowering fields, is there a time
What about all the dreams that you said was yours and mine

Did you ever stop to notice all the children dead from war
Did you ever stop to notice this crying earth, these weeping shores...

I used to dream, I used to **glance** beyond the stars
Now I don’t know where we are
Although I know we’ve **drifted** far...

Adapted from: <https://bit.ly/2znXyP6>



- In groups of 3-4 students, analyze the song lyrics verse by verse. What is Michael Jackson trying to communicate?
- Do you think that songs are a good way to raise awareness about the environment? Why or why not?



Inspired by the lyrics of “The Earth Song”, compose your own song about our planet. Decide on a melody that you know and write new lyrics to go with the melody in your notebook. Your teacher will decide if you should do this individually or in small groups.

Vocabulary

shed. lost

weeping. crying

glance. look

drifted. traveled slowly
and without destination



If you can, listen to the song. Notice how some words are longer than others when singing. Do you think listening to music is a good way to improve your English? Why or why not?

Oral Communication

Is there a recycling program in your community?

If there is, describe it to the class. If not, why do you think there isn't one?



Listen to two friends talk about a new school recycling program. Then decide if each of the following sentences are **True (T)**, **False (F)**, or **Not Mentioned (NM)**.

1. The school just started a new recycling program this year. T F NM
2. There are two different containers: one for recyclables and one for non-recyclables. T F NM
3. The school has reduced waste by 50% this year. T F NM
4. Both friends have recycling programs at their schools. T F NM
5. Both friends think it is important to help save the planet. T F NM



Grammar Note

In this dialogue, you can hear the words *so* and *such* come up often. Can you remember the rule for the use of these words? Take some examples from the dialogue:

SO: *That's so cool! It's so simple.*

SUCH: *It's such a great idea. It's such an easy system to use.*

Use the examples to write the rules below:

SO is used...

SUCH is used...



Write four sentences about things your school does or could do to help the environment. In two of the sentences, use *so*, and in the other two, use *such*.

1. _____
2. _____
3. _____
4. _____



Even though there are initiatives to implement recycling programs, it seems many people still throw away items that can be recycled. Why do you think this is? What can we do to motivate people to recycle more?



Reading

What do you think the benefits are of recycling for the planet? Make a list together as a class.



Amazing Facts About Recycling

Recycling is a process by which new material is created using old items. It is part of a waste disposal **hierarchy** that is: reduce, reuse, recycle. Here are 10 important facts about recycling.

1. Recycling one aluminum can save a lot of energy...enough to run your TV for three hours!
2. Recycling helps conserve natural resources like gas, **coal**, and oil.
3. Recycling 2,000 pounds of paper can save 17 trees.
4. The plastic bags that have ended up in the ocean kill over a million sea creatures every year.
5. Over 60% of what is thrown away in the garbage can be recycled!
6. A modern glass bottle takes about 4,000 years to decompose, and maybe even longer in a landfill. And this glass is 100% recyclable.
7. Most people produce about 4.4 pounds of garbage every day.
8. By recycling one **ton** of plastic, we can save between 1,000-2,000 gallons of gasoline.
9. Recycling one glass bottle can save enough energy to power a 100-watt bulb for four hours.
10. Making recycled paper produces 70% less air pollution than making new paper.

Adapted from: <https://bit.ly/2SPEm3J>



Vocabulary

- hierarchy**. a ranked series of things
- coal**. black substance made of carbon
- ton**. unit of measurement equal to 2,000 pounds

Synthesize the material from the reading and organize it into the boxes below. Write complete sentences in your own words.

Glass	
Plastic	
Paper	
Aluminum	
Other Facts	

Writing

Have you ever written a letter to an authority? To whom? For what?

A Letter to My Principal

You have decided to write a letter to your principal to try to convince him or her to do something about recycling at your school. If you do not have a program, you are writing to suggest implementing a recycling program in your school. If you already have a program, you are writing to let your principal know your thoughts about the program, how it is working, and if you suggest any improvements.

Think about how you are going to organize your letter. This is a formal letter, so you need to use the appropriate greeting and formal language.

Dear Principal _____ (last name):

Then you can start the body of your letter like this:

The purpose of this letter is to...

Continue the letter by telling your principal why you are writing. Then explain your supporting ideas in a logical order. You should have three of them. Finally, thank your principal for taking the time to read your letter, and sign your name. Use both *so* and *such* at least once in your letter. Also use at least one present perfect passive to say what has or has not been done. Your letter should be 80-100 words.

Dear *Principal* _____ (last name):

The purpose of this letter is to...

[illegible]

Tip

Remember to use connecting words to link ideas. They help your reader to follow what you write better. When you want to join similar ideas, you can use *furthermore*, *additionally*, *in addition*, *moreover*.



Tip

Remember that “so” is followed by an adjective and “such” by a(n) + adj + noun.

This is so important.

This is *such an important topic*.

Achievement Level - Speaking

Group activity

- 1 — In groups of three, discuss the most serious environmental problems affecting your community today. Why do you think they are serious? What can be done to improve the situation?

Achievement Level - Listening

Individual activity

- 2 — Listen to the person talk about organic foods and decide if each of the statements are **True (T)**, **False (F)**, or **Not Mentioned (NM)**.

- a. Organic food refers to how foods are grown and processed. _____
- b. Organic vegetables can have GMOs. _____
- c. Organic chickens are not given hormones. _____
- d. Organic foods are more delicious than non-organic foods. _____
- e. Organics foods are generally less expensive than non-organic foods. _____

Achievement Level - Grammar

Individual activity

- 3 — Change the following sentences from present perfect active voice to present perfect passive voice. Rewrite each one.

- a. Politicians have not made laws to prevent climate change.

- b. Schools have developed programs to recycle.

- c. People have not learned important lessons about the environment.

- d. Farmers have grown genetically modified fruits in Ecuador.

- e. People have not taken good care of the Earth.

Achievement Level - Reading

Individual activity

- 4 — Read the following passage about Genetically Modified Organisms (GMOs) and answer the questions that follow.

Special techniques have been used to change the genetic composition of plants for many centuries. These have come to be called genetically modified organisms, or GMOs. Experts still have not been able to determine if the pros are more than the cons. GMOs have been proven to be safe in some studies, but not in all studies. They also lower the price of food. Additionally, they have environmental benefits like less water and pesticide use. However, GMOs may cause allergic reactions. They can also harm the environment in that they require toxic herbicides. Because of these negative aspects, many European countries do not allow GMOs. It may take several years to determine if these organisms are really beneficial or not to humans and our planet.

Adapted from: <https://bit.ly/2CMgCZk>

1. The main idea of this paragraph is:
 - a. GMOs are beneficial.
 - b. GMOs are dangerous.
 - c. The pros and cons of GMOs.
 - d. GMOs are grown around the world.
2. GMOs have been shown to be safe
 - a. in all studies.
 - b. in no studies.
 - c. in academic studies.
 - d. in some studies.
3. In this paragraph, the sentence, "They also lower the price of food" is:
 - a. a pro.
 - b. a con.
 - c. neutral.
 - d. It's impossible to tell.
4. All of the following are negative aspects of GMOs EXCEPT:
 - a. They can cause allergic reactions.
 - b. They can harm the environment.
 - c. They have not been 100% proven to be safe.
 - d. They use less pesticides.
5. At the end of the paragraph
 - a. It is clear that GMOs are good.
 - b. It is clear that GMOs are bad.
 - c. It is clear that we have no information of GMOs.
 - d. It is clear that experts still cannot completely decide if they are good or bad.

I'm completing this self-evaluation based on what I learned in the module.

Self-evaluation

Topics	I check (✓) the box that most applies to me			
	I do it very well	I do it somewhat well	I can improve	I can't do it without help
Read and understand information about our planet				
Understand the difference between "so" and "such"				
Write a letter to an authority figure				



Project 1



School Campaign to Save Our Planet!

It's time for you and your fellow students to take charge to help save our planet. You are participating in a school campaign to make fellow students, teachers, and visitors at your school become more conscious of the importance of protecting our own home. You will create a poster to represent your campaign and also come up with a slogan about the environment.

Instructions

Step 1

In groups of three or four students, brainstorm ideas about what your campaign will be about. What is the general focus? Why is it so important? Write some ideas here.

Step 2

Draw a sketch of what your poster will look like.

Step 3

Think of a creative slogan to go with your poster. A slogan should be a short phrase that catches people's attention. Write it here.

Step 4

Select one of your group members to draw the poster on a big piece of poster board. Be sure to color it.

Step 5

Present your campaign to the class. You can vote among your class (or the whole school!) to determine who has the most impressive campaign.



Let's Review

Grammar

Remember that you saw the present perfect passive voice (has/have been + past participle). Think of three things that have been done in your school recently and write them here, using the past perfect passive.

Example: New windows **have been installed** in our classrooms.

1. _____

2. _____

3. _____

Reading

Of all the readings you have done so far in this module, what is the information that has most impacted you? Why?

Grammar

Remember that you saw the uses of *so* and *such*. Complete each of the following sentences with your own opinion.

1. Our world is such... _____

2. Taking care of the environment is so... _____

3. Humans' relationship with nature is so... _____

4. The Ecuadorian Amazon is such... _____

Vocabulary

You learned several new words in the first part of this module. Use the ones listed below in a paragraph about your planet. Be sure to show that you know what they mean in your writing.

ground harm earthquake
debris come up with

Communication and Cultural Awareness

Have you heard of the term “cosmovision”? What does it mean to you?

Culture

Every culture in the world has its own way of viewing its **surroundings**. These views are based on religion, history, or cultural concepts. Even though we may not all share the same opinions, we must respect each other's way of thinking, just like we expect others to respect our own.



The Andean Cosmovision

To understand the Andean cosmovision, one must have an open mind and **be willing to** see things from a different perspective. The Andean cosmovision is mystical. It searches for harmony and recognizes diversity and plurality as positive aspects.

According to the Andean cosmovision, there are three main worlds that coexist. The *hananpacha* is a Quichua word that means “heaven”. This is where the clouds, stars, rainbows, and **lightening** are. The second part, the *kaypacha*, literally means “here land” in Quichua. It includes everything that is found on Earth: animals, people, mountains, plants, oceans, rivers, lakes... Finally, there is the *uckupacha*, the lower world of mystery. This is where the seeds and the spirits of ancestors are buried and come up as new life.

In the Andean cosmovision, it is believed that between the underworld and the earthly world, there is communication through openings such as **caves**, craters, and **lagoons**. The role of human beings is one of interpreters of the messages that are transmitted from heaven. The constellation of the Southern Cross, known as *chakana* in Quichua, is an important symbol that represents the union of the three worlds that are in constant communication.

Adapted from: <https://bit.ly/3dAkAkz>



After reading about the Andean cosmovision, draw a visual representation of the Andean cosmovision based on the elements of the reading.

After reading about the Andean cosmovision, do you agree with it? Does your town or community share any of the views? Write down your ideas here. Be prepared to share them with the class.



Vocabulary

surroundings. everything that surrounds someone or something

be willing to. have the disposition to do something

lightening. electrical surges seen as light during a storm

caves. openings in mountains

lagoons. small lakes of still water

Oral Communication

Have you ever heard of global warming? What is it? Do you know what causes it or how you can stop it?

Causes and Effects of Global Warming

Listen to the following podcast about the causes and effects of global warming. Take notes in the box below to organize the information you hear.

Cause

Effect

Grammar Note

In the podcast, you hear some complex sentences. These sentences include **relative clauses**. These are parts of sentences introduced by relative pronouns, such as *that, which, who, whose, where, or when*. They usually define or give more information about something that came before them in the sentence.

*Global warming is a serious environmental problem **that is getting worse**.*

*The main cause of global warming is carbon dioxide, **which is also known as CO₂**.*

After listening to the causes of global warming, what do you think you can do to reduce the problem? Is there something you can do individually, or does this problem require community action? Discuss these questions in groups of 3-4 students and come up with possible solutions.

Read the grammar tip about relative clauses. After listening to the podcast, complete these sentences with relative clauses with some ideas in your own words.

1. Global warming is a dangerous phenomenon which... _____

2. Carbon dioxide is a gas that ... _____

3. It is difficult to imagine a world where... _____



Vocabulary

greenhouse gas. a gas that absorbs radiation from the sun

bounce. move quickly back from a surface after hitting it

decrease. lower, reduce

Reading

Do you know a young person making a difference in your community, your country, or the world?



You are going to read about a young environmental activist. What do you think activists do? What types of activities do they participate in to promote their message? Brainstorm some ideas in small groups, then share them as a class.



Greta Thunberg

Greta Thunberg is a young Swedish environmental activist. She was born in 2003 in Stockholm, Sweden. She began a major international movement for climate change in 2018 with a simple message: “School **strike** for climate” written on a poster board. With that, she started protesting outside school every Friday, starting “Fridays for the Future”.

Thanks to social media, Greta’s popularity has greatly increased. She has even been nominated for the Nobel Peace Prize. She has spoken at many events about climate change around the world. One of these important trips was in September 2019 to the United States. To show her support for the environment, instead of traveling by airplane, she took a zero-emissions **yacht** from Europe to New York City. She crossed the Atlantic in two weeks and arrived in the United States. There, she met former President Barack Obama and gave a speech. Two days later, she walked in protest with 4 million protestors. Then she spoke before the United Nations in her famous “How **Dare** You” speech.

This is one part of that speech to world politicians:

“You have stolen my dreams and my childhood with your empty words,” she said. “And yet I’m one of the lucky ones. People are suffering. People are dying. Entire ecosystems are collapsing. We are in the beginning of a mass extinction, and all you can talk about is money and **fairy tales** of eternal economic growth. How dare you!” Later, she said, “For more than 30 years, the science has been crystal clear. How dare you continue to look away and come here saying that you’re doing enough, when the politics and solutions needed are still nowhere in sight... You are failing us. But the young people are starting to understand your **betrayal**. The eyes of all future generations are upon you. And if you choose to fail us, I say: We will never forgive you.”

Greta continues to be an environmental activist, traveling around the world to promote climate awareness and taking care of our planet.

Adapted from: <https://bit.ly/2ST4Dyk>



Vocabulary

strike. a collective action of agreeing to stop working until conditions improve

yacht. a large boat

dare. to have the courage to do something

fairy tales. children’s stories about magical beings

betrayal. to fail or abandon someone in a time of need



After reading about Greta Thunberg, reflect on what you read and answer the following questions in complete sentences.

1. Explain in your own words how Greta got started as a climate activist.

2. What was unique about Greta’s trip to the United States?

3. Reread the lines from Greta’s speech. Summarize her message in one sentence. Do you agree with what she says? Why or why not?

Writing

What is the relationship between a cause and an effect?

Cause-Effect Essay

Many phenomena that happen around the world can be linked to a series of causes. As a result of these phenomena, there can also be several effects. You are going to write an essay that discusses the causes and effects of a specific environmental problem.

Step 1

Think about all of the environmental issues you have seen in this module and that you know. They can be related to the land, to the air, to the water, or any other part of our environment you can think of. Write your issue here:

Step 2

Brainstorm the possible **causes** of the issue you chose, at least three. Write them in the column on the left side. Then brainstorm at least three of the **effects** of the same issue and write them on the right side.

Causes	Effects
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Tip

Between your paragraphs, you should include transition sentences. The first sentence of each paragraph should transition your reader from the previous one. You can use linking phrases like “Not only X, but also Y” or “In addition to X, Y”.



Step 3

Outside of class, research your topic and add or change the causes and effects from Step 2. Try to find sources in English, but put what you read in your own words. You should not copy word for word what you read, because that is called plagiarism and is illegal.

Step 4

Organize your essay. In your first paragraph, you should say what issue you are going to discuss and briefly define it. In your second paragraph, talk about the causes of the problem. In your third paragraph, discuss the effects of the issue. In the fourth and final paragraph, propose some ideas of how to fix the problem, based on the causes you wrote in paragraph 2.

Your essay should be 100-120 words. You should use the present perfect passive and relative clauses throughout your essay. Write a draft in your notebook. Your teacher will revise it, give you suggestions, and ask you to turn in a final version.



Language Through the Arts

Do you play an instrument? Which one? If not, would you like to?

Culture

Do you know the difference between bands and orchestras? Orchestras are instrumental groups that include brass instruments, string instruments (like violins, violas, cellos, and bass), and percussion. Bands are instrumental groups that do **not** include string instruments.



Wikipedia / Post of Paraguay

The Recycled Orchestra of Cateura

The Recycled Orchestra of Cateura is an orchestra from Paraguay. But they are not any ordinary orchestra. What makes this orchestra special is that they use instruments that are made from recycled material. The musicians are young Paraguayans from poor neighborhoods who all share a love for music.

The orchestra began their rise to fame in 2012. They are directed by Favio Chavez. There are several different instruments in the orchestra, such as the violin, viola, cello, bass, guitar, flute, saxophone, trombone, and percussion instruments, all made out of garbage that was saved from going into a landfill. They have performed in several countries around Latin America, Europe, and North America. Recently, a documentary was made about the group, which has won many international awards. They play every genre of music from classical to pop to rock to traditional Paraguayan songs.

This orchestra helps to give hope to its members and allows them to play with their own creativity though the designing of their instruments to their musical expression. It gives them a purpose in life that otherwise would be depressing for them, living in the poorest neighborhoods around Asuncion. It allows them to dream about a better future and contribute to our world through their beautiful music.

Adapted from: <https://bit.ly/3cka2WG>



Based on the reading, determine if each of the following sentences are **True (T)**, **False (F)**, or **Not Mentioned (NM)**.

1. The Recycled Orchestra is from South America.	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> NM
2. The orchestra has been famous for 2 years.	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> NM
3. The orchestra plays many different types of music.	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> NM
4. Many people donate money to the orchestra.	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> NM
5. Members of the group dream of a better future.	<input type="radio"/> T	<input type="radio"/> F	<input type="radio"/> NM

Imagine you were going to construct one of the instruments in the orchestra. Which one would you choose? How would you make it? What materials would you use?

Oral Communication

What other ways have you seen to package drinks apart from plastic bottles?

Edible Water Bottles

Listen to the podcast about edible water bottles and choose the best answer for each question.

1. Plastic bottles take about ...
 - a. 700 years to decompose.
 - b. 700 years to be recycled.
 - c. 600 years to dissolve.
 - d. 600 years to melt.
2. Only _____ of plastic bottles are recycled.
 - a. 20%
 - b. 25%
 - c. 30%
 - d. 35%
3. The inventor of the Ooho is from
 - a. Mexico.
 - b. The U.S.
 - c. Spain.
 - d. It isn't mentioned in the podcast.
4. The first step to make edible water bottles is
 - a. to put them in gelatin.
 - b. to pour water into a bottle.
 - c. to leave them in a solution for a long time.
 - d. to freeze the water in balls.
5. The Ooho has _____ received positive reviews.
 - a. always
 - b. sometimes
 - c. never
 - d. The podcast doesn't mention this.

Grammar Note

Notice the words that come up in the podcast like *rethink*, *recycle*, *reuse*, *reinforce*. The **re-** part of the word is called a prefix. It comes before the base word. In this case, "re-" means "again".

With that in mind, what do these words mean?
replace, *rewrite*, *redo*



Vocabulary

edible. able to be eaten

gelatin. tasteless, colorless food ingredient

reinforce. strengthen

get used to. become accustomed to something

Discuss these questions as a class.

1. Would you try the edible water bottle? Why or why not?
2. What other alternatives can you think of to plastic water bottles?

Communication and Cultural Awareness

Should students have a class just about the environment in school?

Environmental Education in Italy

In 2019, Italy became the first country in the world to make environmental education mandatory. This was the result of student protests over climate change and also the changing environmental conditions. Before then, lessons about the environment were part of students' civics classes, but now they are integrated through different school subjects. The students study climate change for a total of 33 hours over the academic year.

Italy's curriculum serves as a pilot program for the United Nations. If the program is successful, other countries might follow. Italy's Minister of Education who made this decision, Lorenzo Fioramonti, said that he wants to be sure that Italian students are well-informed about the environment and learn the truth about climate change so that they can hopefully help to fight it. He firmly believes that every citizen of the world must do his or her part to prevent the complete destruction of the planet we share.

Adapted from: <https://nyti.ms/2yCef9L>



Culture

The Paris Climate Agreement was signed in 2016 by 195 countries, including Ecuador. The goal is to decrease global warming by reducing carbon emissions. It is helping the environment, but it is not enough to entirely stop global warming.

Imagine that you are the Minister of Education in Ecuador. You have decided to implement a program like the one in Italy, 33 hours of environmental studies in one school year. What would the curriculum look like? What would the goal of the course be? What topics would you study? What activities would you do with students from your grade level? In groups of 3-4 students, fill out the curriculum form. Then share your papers as a class. Do you have a lot of things in common?

Environmental Curriculum 3rd course

Program goal: _____

Topics: _____

Activities: _____

Answer the following questions in complete sentences. Then share your answers as a class.

1. Do you think this type of program would also work in Ecuador? Why or why not?

2. Not all Italians agree with students studying so many hours about climate change. What do you think their arguments against it may be?

Oral Communication

What makes a particular quotation become famous?

Famous Quotes About the Environment



Many people have spoken their minds about the environment. Below is a collection of famous quotes about the environment. In groups of 2-3 students, read each one of the quotes out loud. Then, share your interpretation of each one.

Then, if time permits, your teacher will assign a quote to each group and you will stand in front of the class and talk about the quote for one minute. Think of what it means, your opinion, and any examples from real life that relate to the quote.

Grammar Note

Remember that **relative clauses** are parts of a sentence that are introduced with a **relative pronoun** (*who, whose, what, where, when, that*) and give more information about something previous in the sentence. Can you identify any relative clauses in the quotes? Be careful, because the list of relative pronouns sometimes have other functions and do not always introduce relative clauses!

1. "I only feel angry when I see waste; when I see people throwing away things we could use." – Mother Theresa
2. "The Earth is what we all have in common." – Wendell Barry
3. "We have forgotten how to be good guests; how to walk lightly on the Earth as its other creatures do." – Barbara Ward
4. "A nation that destroys its soils destroys itself. Forests are the lungs of our land, **purifying** the air and giving fresh strength to our people." – Franklin D. Roosevelt
5. "What's the use of a fine house if you don't have a tolerable planet to put it on." – Henry David Thoreau
6. "Progress is impossible without change, and those who cannot change their minds cannot change anything." – George Bernard Shaw
7. "He who plants trees loves others besides himself." – Dr. Thomas Fuller
8. "One of the first conditions of happiness is that the link between man and nature **shall** not be broken." – Leo Tolstoy
9. "Environmentally friendly cars will soon **cease** to be an option...they will become a necessity." – Fujio Cho
10. "Like music and art, love of nature is a common language that can **transcend** political or social boundaries." – Jimmy Carter



Vocabulary

purify. to make cleaner

shall. expressing a strong intention

cease. to stop

transcend. go above or cross

Taken from: <https://bit.ly/2STQsc0>

Reading

What can schools do for our planet?



Look at the title of this reading. What do you think the eco-schools program consists of? What do you think students do? Discuss these questions in small groups.

Eco-Schools Program



The eco-schools program is **sponsored** by the UNESCO. It began in 1992 as a result of needs identified at the United Nations Conference on Environment and Development. It is now effective in school classrooms around the world, with over 20,000,000 students that participate. The idea is to get young people involved with the environment in an active way by being able to make decisions at their schools. It **instills** in young people the **concern** for their planet.

How does the program work? It involves three parts: *The Seven Steps Framework*, *the Eco-Schools Themes*, and *Assessment for the Green Flag*. The Seven Steps help the school establish the program and maintain the program. The Eco-Schools Themes are 12 main topics that are the focus of the program: biodiversity and nature, climate change, energy, food, global citizenship, health and **wellbeing**, litter, marine and coast, school grounds, transport, waste, and water. Those schools that **comply** with all of the requirements of the project are **awarded** a green flag. This is an international symbol of positive environmental and social action.

These programs are in schools all over the world, from North America to Asia to Europe to Africa. In Latin America, you can find eco-schools in Guatemala, Honduras, Nicaragua, Costa Rica, Brazil, and Chile. Eco-schools program does many events and activities related to creating awareness about the current state of the environment including projects with plants, water, litter, and wildlife. Its website provides resources for teachers as well as other information about the program. It is the hope that the program continues to grow and add more students to its international network, and that students' participation in the program **sensitizes** them to environmental issues for life.

Adapted from: <https://www.ecoschools.global/>



Vocabulary

sponsored. paid for by a group or organization

instills. to establish an idea in someone's mind

concern. worry, interest

wellbeing. a state of being comfortable and happy

comply. to meet standards

awarded. given as a prize

sensitizes. makes someone sensitive to something



After having read about the eco-schools program, you are going to write a very brief summary of what you read. In order to do this, first you should identify the most important information in the article. Write them in your own words in complete sentences and in a logical order. You should write 40-50 words. Write the summary in your notebook.

Writing

Who might you need to write a formal letter to?

Writing a Business Letter

Sometimes, certain situations in life require us to write a formal letter, also known as a business letter. This type of letter uses formal language and a specific structure. You are going to write your own business letter.

Grammar Note

Since this is a formal letter, it is a good idea to use complex sentences, which often have relative clauses. Try to include a few of them in your letter.

Example: I am writing as the principal of X school, *which is one hour south of Quito, Ecuador.*

Step 1

Imagine you are the principal of your school and you are interested in joining the eco-schools program that you read about on the previous page. You are going to write a letter to the director of the program, Mr. Pramod Sharma, to express your interest and ask for information. Brainstorm the ideas you are going to include in your letter and write them here.

Step 2

Organize your ideas here. First, you should introduce yourself. Then, you should mention why you are writing. Then, you can explain why you are interested in the program and what kind of information you would like. Finally, thank the director for his time and politely express your desire to receive a response. This can all fit in one paragraph.

Introduction: _____

Interest and information: _____

Thank you and desire for response: _____

Step 3

Now write a draft of your letter in your notebook. Start by writing the name of the city or town you are writing from followed by the date in the top right corner. Then write on the left side, "Dear Mr. Sharma:" (use a colon instead of a comma because it is formal). Then proceed to write the body of your letter. To finish, on the left side, write "Sincerely," and sign your name beneath it. Your letter should be 75-90 words.

Step 4

Turn in your letter to your teacher. He or she will give you general feedback to improve your letter. With your teacher's comments, write a clean version of your letter and turn it in again.



Language Through the Arts

What are some things we can do with old clothes?

Culture

What do we do with the old clothes that we no longer use? Some people donate them to charity. Others sell them at low prices to people who need them. Other people use them as rags to clean the house. And others, like Mary MacInnes, turn them into art.



Old Clothes Become Memory Bears

When a loved one dies, we are left with their possessions, including their clothes. We can **donate** them, or we can recycle them and turn them into...teddy bears! The young artist Mary MacInnes from Scotland came up with this idea. She takes the favorite shirt, dress, pants, or skirt of a loved one and uses it to make what she calls a “memory bear”.

Each bear takes about five to six hours to make, which includes the designing, planning, cutting, **sewing**, and the final details. A memory bear costs around \$65. Mary says that when she gives her bears to her customers, almost all of them cry because of the memories that the bears provoke. Some bears even come with a little pocket where a person can put a letter or other important memory from the person who died.

Mary claims that her memory bears help people through the **grieving** process. By giving people a physical item to be able to touch and hug, they feel closer to the one they lost. She says that it is a privilege for her to create something from people’s possessions. Even though making memory bears was not her original plan, she is happy to know she is helping others.

Adapted from: <https://bit.ly/2OG10KV>

After reading about memory bears, decide if each of the following sentences are **True (T)**, **False (F)**, or **Not Mentioned (NM)** in the reading.

1. Mary MacInnes is a young Scottish artist. ☐ T ☐ F ☐ NM
2. A memory bear takes over seven hours to make. ☐ T ☐ F ☐ NM
3. Most customers buy more than one memory bear. ☐ T ☐ F ☐ NM
4. Mary says her bears don't help with grieving. ☐ T ☐ F ☐ NM
5. Making memory bears was Mary's first goal. ☐ T ☐ F ☐ NM

Vocabulary

donate. give something to someone less fortunate

sewing (sew). join or fix something using needle and thread or a sewing machine

grieving. feel sadness, usually because of the death of someone

Think of someone you love who has died. What would a memory bear of them look like? Draw a picture and write a description of the person and the clothes. Be prepared to share your memory bear with the class.



Oral Communication

What do you think sand is used for?

The Importance of Sand to Our Planet



Grammar Note

In this conversation, you hear these words: *interestingly, unfortunately, desperately, easily, luckily*. The **-ly** ending is called a **suffix**, because it appears at the end of the root or base word. It changes an adjective into an adverb.

More examples of **-ly** adverbs are: *surprisingly, dangerously, carefully, really*. Can you identify the root of each word? Can you use each in a sentence? Can you think of more of your own examples?

Write down the answers to these questions in your notebook.



Listen to two friends talk about the importance of sand. Decide if each statement is **True (T)** or **False (F)**. If it is false, correct it to make it true.

- Sand is the most used natural resource on our planet. **T** **F**
- Sand is used to make cement. **T** **F**
- All sand is the same. **T** **F**
- Soon, there will be no more sand. **T** **F**
- Bamboo is a possible alternative to cement. **T** **F**



Think about relationships of cause and effect that we have seen in this module. Listen to the conversation again and answer the following questions.

- What is the cause behind the sand supply diminishing?

- What are the effects of this happening?



Vocabulary

jar. small cylindrical container usually made of glass

run out. not have any more of something

suitable. adequate

Achievement Level - Speaking

Group activity

- 1 — In pairs, discuss some short-term and long-term goals you as young people can have to help your planet. What can you do today? This week? This month? This year? In 20 years?

Achievement Level - Listening

Individual activity

- 2 — Listen to the news segment about Earth Day and answer the questions that follow.

1. What date is Earth Day? _____
2. How did Earth Day start? _____

3. Does Earth Day have the same theme every year? _____

4. What is the goal of Earth Day? _____

5. What can you do to participate in Earth Day? _____

Achievement Level - Grammar

Individual activity

- 3 — Complete the following sentences with relative clauses and your own ideas. Start with a relative pronoun. Use a different one for each sentence.

1. On this planet, fortunately there are young people _____
2. There are places in Ecuador _____
3. Recycling is an initiative _____
4. We live in an era _____

Achievement Level - Reading

Individual activity

- 4— Read the following text on nature therapy and answer the questions.

We as humans have become an indoor species. We spend less and less time outside. But few of us are aware of the benefits of being surrounded by nature, and there are several. First, being in nature reduces stress by lowering the level of cortisol, the stress hormone. The sights, sounds, and smells of nature help to slow your heart rate and regulate breathing. Second, nature is rich in prana, the primordial force that supports all life. You can absorb a lot of it by breathing fresh, clean air. Third, the natural world inspires a sense of awe in its beauty. You feel humbled in its presence. Fourth, you can reconnect with the ground. If you touch the ground with your bare feet, the flow of energy helps reduce inflammation, stress, and anxiety, and also improve circulation. Finally, being in nature can help improve your sleep rhythms and mood. So this weekend, make plans to spend time outdoors. Your body will thank you for it!

Adapted from: <https://bit.ly/30u2Wds>

- | | |
|---|--|
| <p>1. Nowadays, we humans spend most of our time</p> <p>a. at work c. outdoors</p> <p>b. inside d. none</p> | <p>3. Prana is</p> <p>a. a force c. nature</p> <p>b. air d. a plant</p> |
| <p>2. The sights, sounds, and smells of nature lower the level of</p> <p>a. depression c. cortisol</p> <p>b. breathing d. prana</p> | <p>4. Which of the following does nature NOT help with?</p> <p>a. Stress levels c. Circulation</p> <p>b. Breathing d. Diabetes</p> |

Achievement Level - Writing

Individual activity

- 5— In your notebook or on a separate sheet of paper, write a response paragraph to the reading above. Do you agree that nature therapy works? Why do you feel the way you do? Be sure to provide some specific examples. Write 90-100 words.

I'm completing this self-evaluation based on what I learned in the module.

Self-evaluation

Topics	I check ✓ the box that most applies to me			
	I do it very well	I do it somewhat well	I can improve	I can't do it without help
Use relative clauses correctly				
Understand and use environment vocabulary				
Write a formal letter				

