Our Planet is a book for learning English around environmental topics. The book has been designed on the principles of Content and Language Integrated Learning, and prioritizes communicative language skills. It comes with hands-on activities including community service and research projects. The book is ideal for middle-school children who have a preliminary understanding of environmental topics and know an elementary level of English.

✸ Recommended level of English proficiency: A1-A2
  (CEFR – Common European Framework of Reference for Languages)
✸ Recommended age group: 11-14 years old
✸ Recommended total hours of instruction: 20
  (excluding projects)

Our Planet can be used:

✸ As a course book for a stand-alone course in an afterschool program, summer camp, or other extra-curricular settings
✸ As supplementary material for a school curriculum

The companion website (https://ace.aua.am/ourplanet) includes:

✸ Teacher's Manual with instructions for activities in the book, answer key, handouts, cutouts, and additional lesson ideas
✸ Teacher's Slides: downloadable PowerPoint slides that accompany some listening activities and provide visuals and suggested script for the teacher
✸ Relevant web links

American University
of Armenia Press

OUR PLANET

Dianna Torosyan
Irshat Madyarov

Our Planet

Preface and Acknowledgements

This book is born out of a spirit of collaboration between two research centers at the American University of Armenia (AUA)—the AUA Center for Research in Applied Linguistics and the AUA Acopian Center for the Environment. It is also born out of the belief that learning can be enhanced by embedding locally relevant content in the educational materials.

As part of completing AUA's Teaching English as a Foreign Language (TEFL) Master's program, Dianna Torosyan took the ambitious task of developing curriculum for teaching English to middle-school children using environmental topics. Under the supervision of Professor Irshat Madyarov, she compiled her work into a textbook, which we now publish as a useful learning resource.

Importantly, Linda Shahinian and Herb Schiff made a generous contribution to the AUA Acopian Center for the Environment, which the Center decided to direct to the publication of this textbook. Without their support this publication would not have been possible.

The textbook has gone through a lengthy process of review and enhancement. The AUA Acopian Center recruited Hasmik Ter-Voskanyan, a long-time collaborator with the Center, to provide a technical and scientific review of the textbook. Versions of the manuscript were reviewed by Linda Shahinian, Suzanne Daghlian, and Cali Jackson.

The crack team from the AUA Acopian Center for the Environment—Litta Muradyan, Tatevik Vardanyan, Siranush Harutyunyan, and Marine Asatryan (formerly at the Center)—have contributed to the realization of this publication with utmost professionalism and commitment.

This textbook has benefited from the creative talent of several individuals. Nvard Yerkanian, recruited by the AUA Acopian Center, provided layout and graphic design support. Artur Sandoyan volunteered his artistic talent to draw visuals for the video materials that complement this textbook. Mica Hilson provided the voice-over narration to bring the visuals in the videos to life. Armen Safaryan and Svetlana Ghukasyan edited the videos. Finally, Margarit Gevorgyan helped with checking the copyrights of the images and substituting them when needed.

In 2015, the AUA Acopian Center for the Environment was managing a Small Grant Program from the Norwegian Embassy in Moscow.[*] Dianna and her fellow students received funding from this project to pilot teach the textbook materials. The pilot was highly successful and many recommendations for improvement came from it. The following people and organizations were greatly helpful in making the pilot a success:

- The 42 school children in the villages of Hatsik and Karakert for their diligent participation and enthusiasm during the pilot stage
- Tatev Mkrtchyan of Hatsik Secondary School after Avetis Baghdasaryan
- Tamara Baghdasaryan of Karakert Secondary School N1
- Varditer Papoyan of Karakert Secondary School N2
- Hayk Sargsyan of the Karakert Community Center
- Zhenya Yesayan and Tatevik Vardanyan who helped teach the classes
- The English Program of the Children of Armenia Fund
- Gayane Zargaryan of Peace Corps in Armenia

The AUA Acopian Center for the Environment and the AUA Center for Research in Applied Linguistics have a strong emphasis on community outreach and impact. This publication is one illustration of this focus, offering language learning that could open the world to our younger generations and deepen their appreciation for the complexity and beauty of our natural environment.

Irshat Madyarov, Director, AUA Center for Research in Applied Linguistics (cral.aua.am)
Alen Amirkhanian, Director, AUA Acopian Center for the Environment (ace.aua.am)

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[*]   https://ace.aua.am/environmental-education/een

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Let's Review

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Let's Review

Supplementary resources:

| TM | Teacher's Manual. Visit https://ace.aua.am/ourplanet to download the Teacher's Manual for additional instructional materials including answer key, handouts, and other resources. |

| TS | Teacher's Slides. Visit https://ace.aua.am/ourplanet to download PowerPoint Slides to accompany some activities in the book. Most listening activities are based on TS where the teacher is expected to show the visuals and present a suggested text. |

Do you know…?

Look at the picture and describe the Earth. TM TS

- What color is our planet?
- What do we see on Earth?

What are biomes?

There are five biomes on Earth. They are **water, desert, forest, grassland,** and **tundra.**

VOCABULARY
Words Describing Biomes

1   **Learn the words with your teacher.**

TM   TS

2   **Write the words that describe each picture.**

forest
desert
grassland
water
tundra

a. _____

b. _____

c. _____

d. _____

e. _____

3 **Watch the slides. Listen and learn with your teacher.**

TM   TS

READING
Biomes of the World

4 **Read about biomes.**

There are deserts, forests, grasslands, water, and tundra on Earth. They have different climates.

Water biomes are oceans, rivers, and lakes. There are a lot of big and small animals and plants in water biomes. Water biomes can be warm or very cold.

There are hot and cold **deserts**. There is a lot of snow or ice in cold deserts. There is a lot of sand in hot deserts. There are some animals and plants in hot deserts: cacti, lizards, and snakes.

lizard

snake

cactus

Forests are very important for life on Earth. There are a lot of plants and animals. Trees and other plants give oxygen to people and other animals. Many forests have four seasons - spring, summer, autumn, and winter.

Grasslands have a lot of grasses and flowers and not a lot of trees. In grasslands, there are lions, wolves, and zebras. Grasslands can be very hot and very cold.
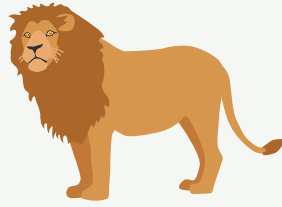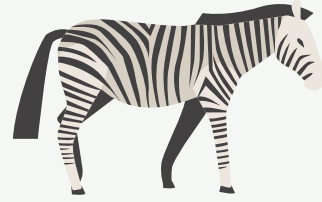
lion   zebra   wolf

Tundras are cold biomes on Earth. There is a lot of snow. Not a lot of animals and plants live in tundras, but there are arctic hares and arctic foxes.
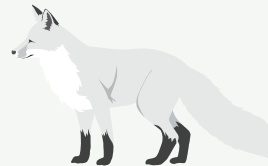
arctic hare   arctic fox   snow
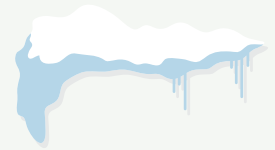
5 **Read the sentences below. Write *True* or *False* next to each sentence.**

1. Forests can have four seasons. *True*

2. Tundra is very cold. _____

3. There are no animals living in forests. _____

4. There are a lot of trees in grasslands. _____

5. Trees and other plants give oxygen to people and other animals. _____

6. Oceans and rivers are water biomes. _____

7. There are hot and cold deserts. _____

GRAMMAR
There is/ There are

There is a zebra in
the grasslands.

There are zebras in
the grasslands.
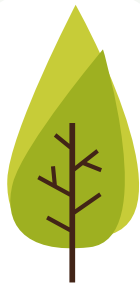
There is a tree in
the garden.

There are trees in
the garden.

6 **Read and circle the right answer.**

1. There is / (are) zebras in the grasslands.

2. There is / are oxygen on Earth.

3. There is / are trees and other plants in forests.

4. There is / are forests in Armenia.

5. There is / are a lion in the field.

6. There is / are a lot of grasses in grasslands.

7. There is / are a lot of big and small animals in water.

8. There is / are a snake in the field.

9. There is / are cacti in deserts.

10. There is / are a big tree in the garden.

Look at the pictures and fill in: *there is* or *there are*. Then write the name of the biome. The first one is an example.

1. *There are* trees in the picture.
2. *There are* two bears.

Biome: *This is a forest.* _____

1. _____ a dolphin in the ocean.
2. _____ no trees.

Biome: _____

1. _____ trees in the picture.
2. _____ snow.

Biome: _____

1. _____ not a lot of plants in the picture.
2. _____ a lot of sand.

Biome: _____

1. _____ a lot of grasses in the picture.
2. _____ animals.

Biome: _____

SPEAKING
Guessing the Biome

8 **Choose a partner. Take a flashcard. Do not show it to your partner. Describe the biome in your picture. You can use the information from the reading. Your partner will guess the biome.**

For example:

You describe this biome:
There are a lot of grasses.
There are not a lot of trees.
Your partner answers:
The biome is a grassland.

WRITING
Describing the Planet Earth

9 **Watch the video and describe the world by completing the sentences below.**
ace.aua.am/ourplanet

1. We live on the _____.

2. People can live on Earth because there is _____.

3. The planet Earth has five _____.

4. The biomes on Earth are_____.

5. In the forest, there are a lot of _____.

6. The climate in tundras is always _____.

7. The climate in deserts is _____.

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

VOCABULARY
Words Describing Living and Non-living Things

eat

breathe

grow

1 **Listen to the teacher say the following words: *eat, breathe,* and *grow*. Stand up and use your body to act out the words.**

LISTENING

Living and Non-living Things

2   **Watch the slides. Listen and learn with your teacher.**

3   **Answer the questions below.**

1.   Give examples of living things.

2.   Give examples of non-living things.

3.   Can non-living things grow or breathe?

4.   What can living things do?

READING

Living and Non-living Things

4   **Read about living and non-living things.**

All things in the world are living or non-living. Living things, such as zebras, can eat, breathe, and grow. Non-living things, such as chairs, cannot eat, breathe, or grow.
Look at this chart.

IT	EATS	BREATHES	GROWS
	YES	YES	YES
	NO	NO	NO

A zebra eats grass. It breathes. A zebra can grow and become big. Zebras are living things.

A chair cannot eat. It cannot breathe. A chair cannot grow. It cannot become big. Chairs are not living things.

All things that can eat, breathe, and grow are living things. All things that cannot eat, breathe, or grow are non-living things.

	LIVING THINGS	NON-LIVING THINGS
EAT	YES	NO
BREATHE	YES	NO
GROW	YES	NO

5 **Look at these pictures. Which ones are living or non-living? Add them to the chart.**

tree
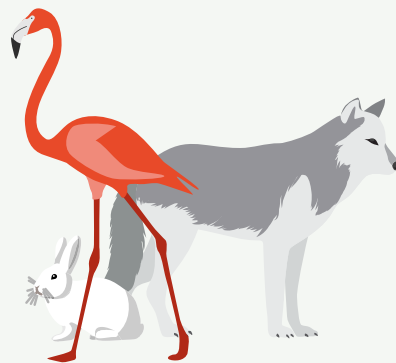
animals

water

rocks

sand

car

LIVING THINGS	NON-LIVING THINGS

WRITING

Finding Living and Non-living Things

6 **Look around your classroom and name three living things and three non-living things. Make sentences with those words. Walk around and share the sentences with your classmates.**

Living things	Non-living things
I see a flower.	*There is a blackboard.*

GRAMMAR
Can/Cannot

Animals can breathe.
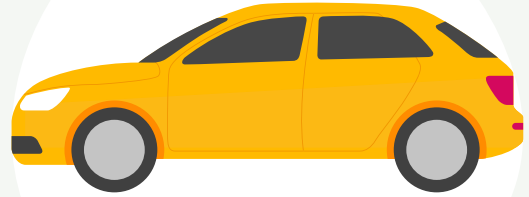
Cars cannot breathe.

Trees can grow.

Chairs cannot grow.

People can eat.

Water cannot eat.

Look at the pictures. Write three things you can do. Write three things that the objects in the pictures cannot do.

Can   **Cannot**

I can breathe.   *The chair cannot breathe.*

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

SPEAKING
Describing and Guessing a Biome

8   **Make small groups. Each group gets a flashcard of a biome. Find living and non-living things in the flashcard. Describe the biome to another group. They will guess the biome.**

Example
Your group presents:

There are trees, other plants, and a bear. The bear, trees, and other plants are living things. They can breathe, eat, and grow. There are also rocks and sand in the picture. They are non-living things. They cannot breathe, eat, or grow.

The other group answers: It is a forest.

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

What are ecosystems?

An ecosystem is a place that living and non-living things share. The biomes of the Earth (deserts, water, tundras, grasslands, and forests) are ecosystems.

VOCABULARY
Words Describing Ecosystems

1 **Learn the words with your teacher.**

TM   TS
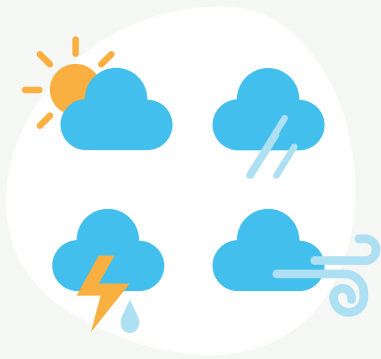
climate

pond
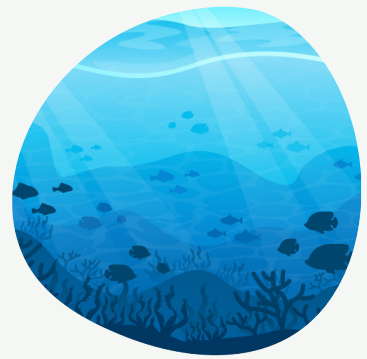
ocean
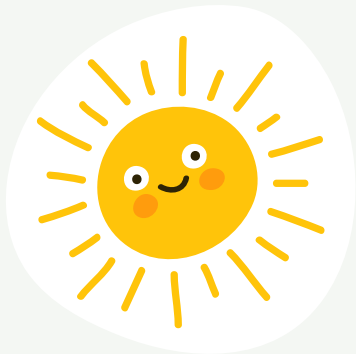
sun

big

small

2 Match the pictures with the words in the box.
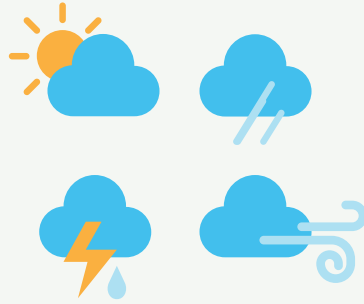
1. *small bear*   2. _____   3. _____
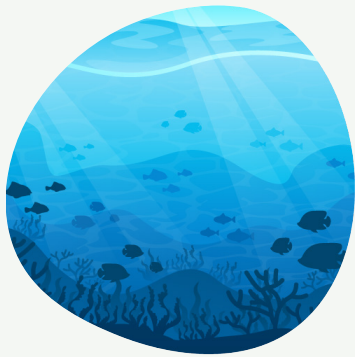
4. _____   5. _____   6. _____

> big bear   climate   ocean
>
> ~~small bear~~   pond   sun

3 Put the letters in the right order to make words.

1. llsam   *small*   6. plnta   _____

2. clmiaet   _____   7. anmila   _____

3. gbi   _____   8. waert   _____

4. dnop   _____   9. nus   _____

5. desrte   _____   10. ocane   _____

READING
Ecosystems

5 Read about ecosystems.

Ecosystems

An ecosystem is a place that living and non-living things share. An ecosystem can be very small, for example, a small pond. An ecosystem can be very big, for example, a desert, tundra, or grassland.

Most animals and plants that live in one biome cannot live in another one. For example, arctic foxes from tundras cannot live in forests because of the different climate and food in forests. Zebras from grasslands cannot live in tundras because of the cold climate in tundras.

In a water biome, there are living things: animals and plants. There are also non-living things: water, rocks, and sand. All these living and non-living things need each other. Without water, animals cannot live. Without soil or sand, plants cannot grow. Without plants, animals cannot eat and breathe. So, in an ecosystem, living and non-living things need each other.

This is a water biome.

water

plants

sand

animals

rocks

| 6 | **Work in small groups and answer the questions with 1-2 words. Then share the answers with other groups.** |

1. Give an example of a very big ecosystem. _____

2. Give an example of a small ecosystem. _____

3. Are biomes ecosystems? _____

4. Can living and non-living things share an ecosystem?

   _____

5. Can an arctic fox from tundra live in an Armenian forest?

   _____

GRAMMAR
Because of

BECAUSE OF...

- *Because of* the cold climate, cacti do not grow in tundras.

- *Because of* the different food and climate, arctic foxes cannot live in deserts.

7 **Read the sentences below. Make one sentence out of two. Use *because of*.**

1. The climate in tundras is cold. Arctic hares live in tundras.

   Because of the cold climate, arctic hares live in tundras.

2. There is oxygen and food on Earth. People can live on Earth.

   _____ oxygen and food, people can live on Earth.

3. The climate in deserts is hot. There are a lot of cacti in hot deserts.

   _____ the hot climate, there are a lot of cacti in hot deserts.

4. There is food in forests. A lot of bears live in forests.

   _____ the food, a lot of bears live in forests.

5. There is a lot of snow in tundras. Tundras are very cold.

   _____ snow, tundras are very cold.

SPEAKING
Describing Ecosystems

8 | **Look at the teacher's slide and answer the questions.**

1. What is this?

2. Is it a big or small ecosystem?

3. What are the living things in this ecosystem?

4. What are the non-living things in this ecosystem?

5. In this ecosystem, do living and non-living things need each other? Why?

WRITING
Creating an Ecosystem

9 | **Make a group of 3-4 students. In your groups, think of an ecosystem in your region. Draw the ecosystem below.**

10 List the living and non-living things in your ecosystem.
Use your list to describe your ecosystem to another group.
Keep your drawings for the next class.

_____

_____

_____

_____

_____

_____

_____

_____

WORD WALL

Make a word wall on the poster and write all the new words
you have learned in this unit.

PROJECT
Planting Trees

1 **Learn the words with your teacher.**

shovel

gloves

bucket full of
water

tree

hole in
the ground

2 **Look at the steps and number them in the right order.**

STEP ____ Dig a hole with a shovel.

STEP _1_ Find a place for planting trees.

STEP ____ Water the tree.

STEP ____ Fill the hole with soil.

STEP ____ Put the tree into the hole.

STEP ____ Water the tree every other day for 3 months.

STEP _7_ After 3 months, water the tree weekly for two

or more years.

3 **Make a plan with your teacher to plant trees in your community. Where can you plant them?**

VOCABULARY

Words Describing Human Impact on the Earth

1 **Learn the words with your teacher.**

TM TS

pollute

cut down
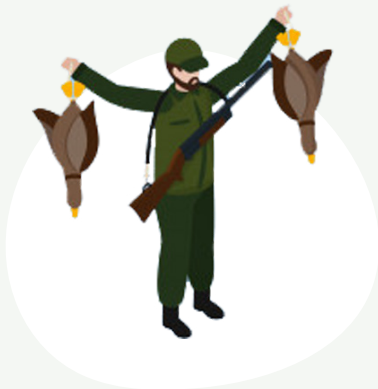
kill

people

die

clean

2 Make small groups. Flip a coin. If you get heads, move 1 circle ahead. If you get tails, move 2 circles ahead. When you are on a picture, name it using the words you know.

START

1

2

3

4

5

6

7

8

FINISH

3 Match the verbs with the nouns in the box. More than one match is possible.

1. Kill _____

2. Cut down _____

3. Clean _____

4. Pollute _____

trees
animals
water
oceans

LISTENING
Environmental Problems

4 **Watch the slides. Listen and learn with your teacher.**

READING
Human Impact on the Environment

5 **Read about how people harm the environment.**

People and the Environment

People harm the environment a lot. For example, they pollute water and air. They cut down a lot of trees. They kill a lot of animals. This is very bad.

People pollute water. A lot of animals and plants die because of polluted water. Polluted water is also bad for people. People get sick because of eating fish from polluted lakes.

Also, people pollute the air with cars and factories. The smoke from cars and factories is very harmful. People and other animals get very sick from this smoke.
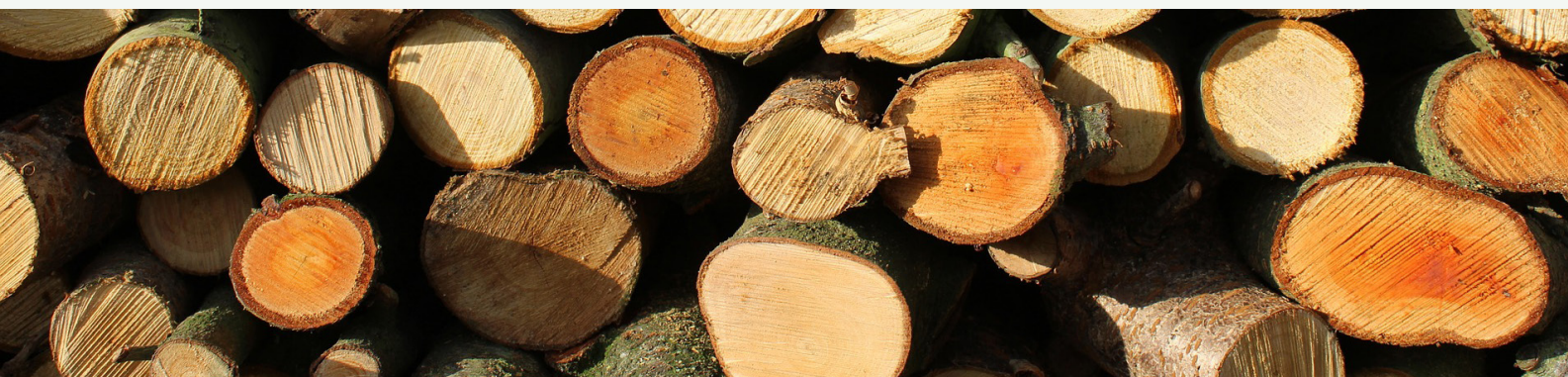
People cut down a lot of trees and kill a lot of animals. When people cut down a lot of trees in a forest, it is deforestation. When a forest burns because of a fire, it is also deforestation. Because of deforestation, forests die. Trees give out oxygen. People and other animals need oxygen. Without trees, there is little oxygen. Trees are also very important for clean air. Because of cutting down trees and deforestation, people can get sick. Because of cutting down trees and deforestation, a lot of animals die. People and other animals need the environment and people should not harm it. Look at this forest ecosystem. This picture shows that people have cut down too many trees.

PEOPLE HAVE CUT DOWN A LOT OF TREES

6 **Fill in the chart below with causes based on the text above.**

CAUSE	EFFECT
People pollute water.	A lot of animals and plants die. People can get sick.
	Animals do not have a home to live in. They can die. There are no trees to clean bad air.
	People can get sick if there is no good air.

WRITING
Naming Environmental Problems

7 **Watch the video and match the pictures with the words.**
ace.aua.am/ourplanet

pollute water   cut down trees   kill animals

1. _____   2. _____   3. _____

GRAMMAR
Should/Should not

People should not cut down a lot of trees.

People should save trees.

People should not kill a lot of animals.

People should save animals.

8 **How can you help the environment? Use *should* or *should not* with a phrase in the box to write your ideas.**

cut down trees and other plants
buy a lot of clothes
~~take short showers~~

eat a lot of meat
plant trees
not watch a lot of TV

1. *I should take short showers.*
2. I
3. I
4. I
5. I
6. I

SPEAKING
People and the Environment

9   **Make a small group. Look at your drawings of the eco-systems from the last class. Think about how people kill ecosystems. What are the solutions to such problems? Fill in the chart below. After you finish, present it to other groups.**

PROBLEM	SOLUTION
1. *The lake is dirty.*	1. *People should not pollute the lake.*
2.	2.
3.	3.
4.	4.

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

PROJECT
Conducting a Survey

1 **Conduct a survey and find out about environmental problems in your community. Below is an example of a survey. You can change it with the help of your teacher and translate it into Armenian.**

Dear neighbor,

We are conducting this survey for a class. Please take a few minutes to fill it out. Thank you.

Which environmental problems are serious in your village or neighborhood?

- ☐ Water pollution from industry (in a river, lake, pond)
- ☐ Water pollution from trash or garbage (in a river, lake, pond)
- ☐ Air pollution from factory smoke
- ☐ Air pollution from cars, trucks, or buses
- ☐ Polluted area with trash or garbage
- ☐ Little clean water to drink
- ☐ A lot of wild animals or birds being killed
- ☐ Fish dying in a river, lake, or pond
- ☐ Too many trees being cut down
- ☐ Land pollution from trash or garbage

2 **Bring your surveys to class. With the help of your teacher, create a chart or graph with the results.**

3 **Discuss these questions based on the results.**

1. Which problems are very serious?

2. Which problems are not very serious?

3. What can we do to solve the problems?

Let`s Review

1 **Match the words with the pictures.**

plant	pollute	animals
tree	tundra	cut down trees
water	desert	plastic bottle

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

2 Make two teams. Each team will form a line. Listen as your teacher says a word. The first person in line races to the board to write the word. Each person will take a turn.

3 Complete the sentences with the right words.

1. Tundras, deserts, forests, grasslands, and water are _biomes._

2. Living things can eat,_____, and

   _____.

3. Non-living things cannot eat, _____, or _____.

4. Plants and animals are living things. Gloves, rocks, cars are

   _____ things.

5. Living things and _____ _____ share an

   ecosystem.

6. An arctic hare cannot live in Armenia because of _____

   _____.

7. People _____ not cut down a lot of trees.

Let`s create a mind map of natural resources on Earth. After you finish, discuss it.

WATER

2.1 Renewable and Non-renewable Natural Resources

VOCABULARY
Words Describing Natural Resources

1 **Learn the words with your teacher.**
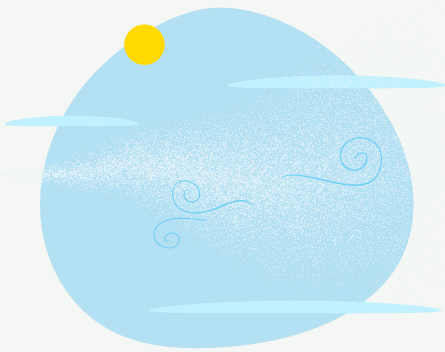
air

coal

oil
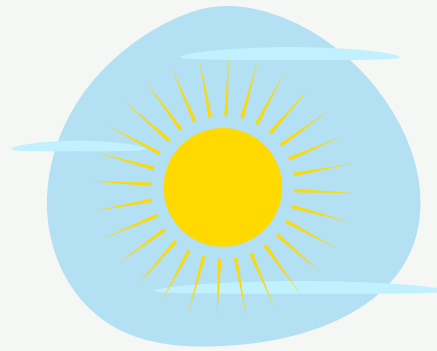
sunlight

nature

natural resources

2 Watch the slides. Listen and learn with your teacher.

TM TS

READING
Renewable and Non-renewable Natural Resources

3 Read about renewable and non-renewable resources.

Renewable and Non-renewable Resources

We use natural resources every day. For example, we drink water, breathe oxygen, and use gas. Nature has water, oxygen, and gas. Water, oxygen, and gas are natural resources. There are also other natural resources, for example, plants, animals, coal, and oil.

There are two types of natural resources.

Natural resources

Renewable resources

Non-renewable resources

water
air   animals
plants   sunlight

coal
gas
oil
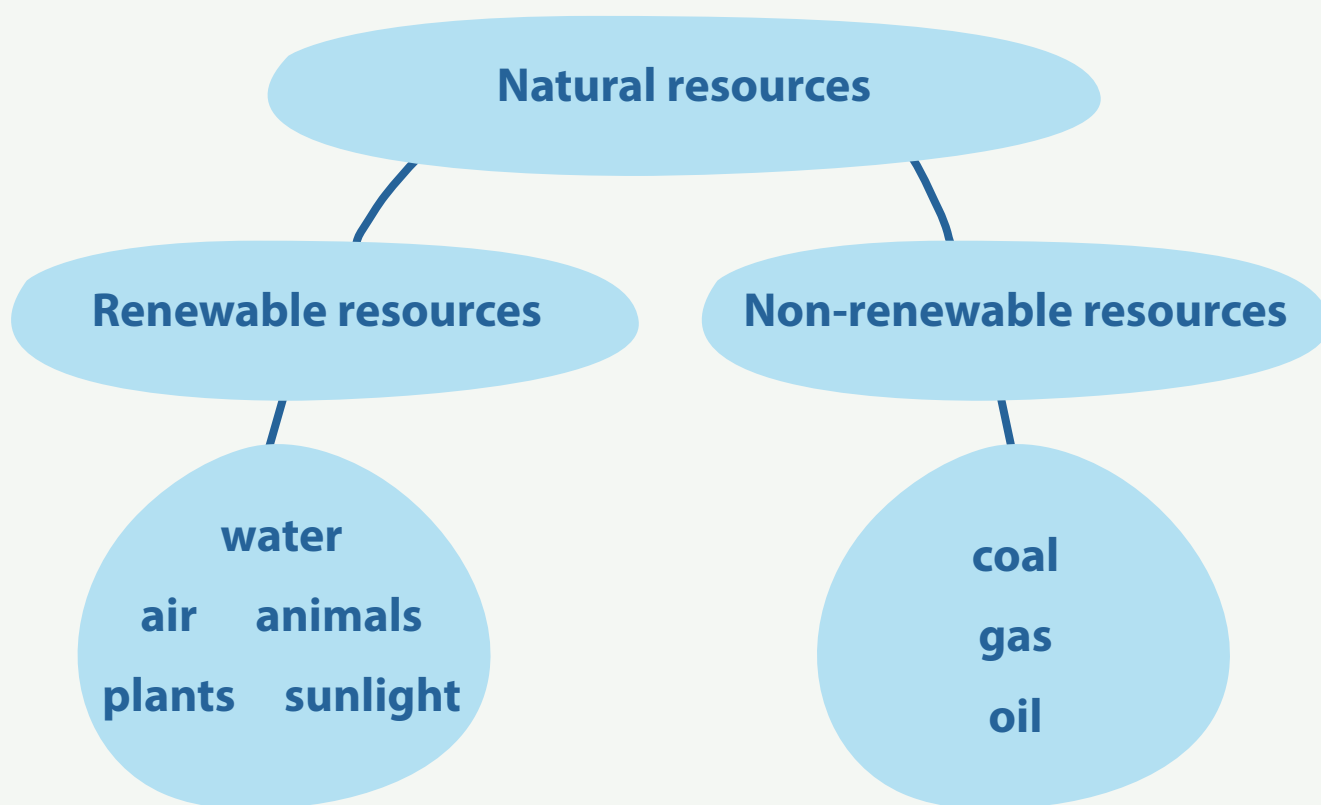
Renewable resources can come back. For example, you breathe oxygen every day. But oxygen comes back through trees and other plants. Water comes back as rain and snow. But renewable resources can also end if we use them too much.

Non-renewable resources cannot come back for a long time. For example, if we use up gas, there will be no gas for a long time. If we use up oil, there will be no oil for a long time. Fossil fuels are also non-renewable resources. Coal, petrol, and natural gas are fossil fuels. If we use up fossil fuels, there will be no fossil fuels for a long time. We should save renewable and especially non-renewable resources.

4   **Read the sentences below. Write *True* or *False* next to each sentence.**

1. There are renewable and non-renewable resources. *True*

2. Renewable resources can come back. _____

3. Non-renewable resources can come back. _____

4. Gas is a renewable resource. _____

5. Trees and seawater are renewable resources. _____

6. Coal and oil are renewable resources. _____

7. Coal, petrol, and natural gas are fossil fuels. _____

8. Fossil fuels are non-renewable resources. _____

5 Circle the right answers.

1. Find two renewable resources and circle the letters.

(a) plant   (b) animal   c coal   d gas

2. Find two renewable resources and circle the letters.

a zebra   b coal   c sunlight   d oil
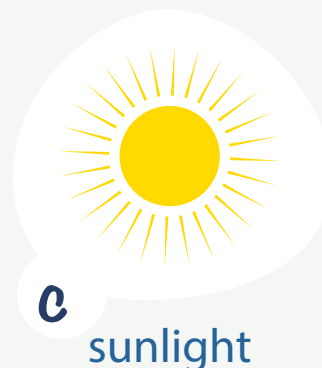
3. Find two non-renewable resources and circle the letters.

a bear   b oil   c gas   d water

4. **Find two non-renewable resources and circle the letters.**

a

trees

b

coal

c

water

d

oil

WRITING

Naming Renewable and Non-renewable Resources

6 **Give examples of renewable and non-renewable resources in Armenia.**

RENEWABLE RESOURCES	NON-RENEWABLE RESOURCES

Finding Renewable and Non-renewable Resources

7 **Make small groups. Choose one of the biomes and fill in the chart. You can use the word bank. After you finish, walk around the classroom and present it to your classmates. Let your classmates guess your picture.**

1. Water biome

2. Water biome full of oil

3. Forest biome

4. Forest biome full of coal

WORD BANK

renewable resource	plants
non-renewable resource	animals
trees	oil
water	coal

1. In this picture, there _____

_____.

2. _____ is a renewable resource.

3. _____ is a non-renewable resource.

(Skip the last sentence if there are no non-renewable resources in the picture).

GRAMMAR

Present Simple: affirmative and negative

AFFIRMATIVE	NEGATIVE	
	LONG FORM	**SHORT FORM**
I *save* water.	I *do not pollute* water.	I *don`t pollute* water.
We *save* water.	We *do not pollute* water.	We *don`t pollute* water.
They *save* water.	They *do not pollute* water.	They *don`t pollute* water.

8 Look at the picture and complete the sentences with the correct form of the words in the box.

save   do   ~~clean~~   live   come   wear

1. Armine and Aram ___*clean*___ the pond every month.
2. Armine and Aram _____ in a village next to the pond.
3. Jake and his family_____ from England.
4. Jake, Armine and Aram sometimes _____the cleaning together.
5. The friends always_____ gloves to clean the pond.
6. They _____ animals and plants.

Write the correct negative verbs in the blanks. Use either the long or short negative form. Take turns to read and check your sentences with your classmates.

1. Armine and Aram *do not pollute* (not/pollute) water. They clean it.

2. The friends_____(not/kill) animals and plants. They love them.

3. Armine and Aram_____(not/cut down) trees. They save them.

4. We_____(not/use) a lot of water. We save it.

5. I_____(not/take) long showers. I save water.

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

VOCABULARY

Words Describing Overuse of Natural Resources

1 **Make a sentence using a verb from the circle and a noun from the square. More than one match is possible.**

save   use

destroy   overuse

animals   water

plants   trees

natural resources

1. *Save water*

2. _____

3. _____

4. _____

5. _____

LISTENING

Saving Natural Resources

2 **Watch the slides. Listen and learn with your teacher.**   TM   TS

3 **Read about the importance of natural resources.**

Natural Resources

Natural resources are very important for people. If there are no natural resources, people cannot live. But people overuse natural resources. This is a big problem.

For example, people overuse water. If there is no fresh water, people have no water to drink. If there is no fresh water, a lot of forests and grasslands become deserts.

People also kill a lot of animals. For example, if people pollute rivers and lakes, a lot of fish die. If animals die, ecosystems die too.

Trees are also a natural resource. If people cut down a lot of trees, there is little oxygen. If there is little oxygen, people and other animals have difficulty breathing.

We should save natural resources. We can save water, if we:

turn off the water tap while brushing our teeth

wash only full loads in a washing machine

take a short shower

turn off the water tap while washing the dishes

grow plants that use little water

We can save trees and other plants, if we:

don`t cut down trees

don`t destroy plants

We can save animals, if we:

don`t pollute water

don`t kill animals

4 **Complete the sentences based on the reading text. Write what you can or should do to save natural resources. Share your answers with your classmates.**

1. I can ____*take short showers*____ to save ____*water*____.

2. I can _____ to save _____.

3. I can _____ to save _____.

4. I should _____ to save _____.

5. I should _____ to save _____.

6. I should _____ to save _____.

SPEAKING
Giving Solutions

5 **Make small groups. Based on the reading, draw three examples of how we overuse natural resources. Draw your examples in the chart on the next page.**

6 Now, fill in the chart based on your drawings. On the left, write the problems caused by the overuse of natural resources. On the right, write solutions. After you finish, present your drawings with solutions to the class or other groups.

PROBLEMS WITH NATURAL RESOURCES	SOLUTIONS
1. People use a lot of water.	1. People should take short showers.
	2.
2.	1.
	2.
3.	1.
	2.
4.	1.
	2.

GRAMMAR
If

If people pollute water, a lot of fish die.

If we turn off the tap while brushing our teeth, we can save water.

If people destroy forests, a lot of animals die.

If people cut down a lot of trees, there is not a lot of oxygen.

7   **Read the sentences below. Make one sentence out of two using *if*.**

1. People wash full loads in a washing machine. They can save water.

   If___ people wash full loads in a washing machine, they can save water.

2. People take short showers. They can save water.

   _____ people take short showers, they can save water.

3. People turn off the water tap when washing the dishes. They can save water.

   _____ people turn off the water tap when washing the dishes, they can save water.

4. There is a lot of polluted air. People can become sick.

   _____ there is a lot of polluted air, people can become sick.

5.   People plant a lot of trees. There will be a lot of oxygen.

_____ *people plant a lot of trees, there will be a lot of oxygen.*

6.   People pollute seawater. A lot of animals and plants can die.

_____ *people pollute seawater, a lot of animals and plants can die.*

WRITING
Saving Natural Resources

8   **Sort out renewable and non-renewable natural resources. Then describe how people overuse each of the natural resources.**

gas	trees	coal
water	animals	oil

Renewable Resources   **Non-renewable resources**

_____   _____

_____   _____

_____   _____

Gas is a non-renewable resource. If people use it a lot, it can end.

Water is a renewable resource. If people pollute seawater a lot, animals and plants can die.

Trees _____

_____

Animals _____ 55

_____

Coal _____

_____

Oil _____

_____

WORD WALL

Make a word wall on the poster and write all the new words you have learned in this unit.

2.3 Ecological Footprint

VOCABULARY
Words Describing Ecological Footprint

1 **Match the words with the pictures.**

> drinking water
> clothes
> food
> waste
> transportation

1. _____   2. _____

3. _____   4. _____   5. _____

READING
Ecological Footprint

2 **Read about ecological footprint.**

What is an ecological footprint? Look at this picture and guess what an ecological footprint is.

Ecological Footprint

An ecological footprint shows how much of the natural resources people use. All people have an ecological footprint. You also have an ecological footprint. For example, your ecological footprint is:

- how much water and food you use;
- how many clothes you buy;
- how much you throw away.

Look at these pictures.

You use everything in these pictures. You eat food, drink water, take showers, wear clothes, and use transportation. Many things you use become waste. For example, when you throw away old clothes, they become waste. When you throw away food, that food becomes waste, too.

People can have big or small ecological footprints. If you use a lot of resources, you have a big ecological footprint. If you do not use a lot of resources, you have a small ecological footprint.

It is good when people have a small ecological footprint. They do not overuse resources. They do not create a lot of waste.

3 **Based on the text above, mark (✓) what makes your ecological footprint small:**

☑ saving water
☐ wasting food
☐ buying less
☐ walking or riding a bike instead of using polluting forms of transportation
☐ driving a car instead of using public transportation
☐ taking long showers

4 **Look at the image and create a picture of your ecological footprint by drawing the resources that you use. After you finish, complete the sentences below based on your drawing. Walk around the class to show and talk about the picture of your own ecological footprint.**

1. I buy _____.

2. I eat _____.

3. I wash _____.

4. I create _____.

5. I travel _____.

LISTENING
Small Ecological Footprint

5 · **Watch the video about ecological footprint.
ace.aua.am/ourplanet**

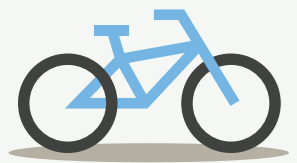**6** · **Based on the video, match the pictures with the words in the box.**

1. We create an ecological footprint because we use:

1. _____ 2. _____ 3. _____ 4. *food* _____

2. To reduce our ecological footprint, we should:

1. _____ 2. *use things again* _____ 3. _____ 4. _____

use public transportation   use less food

~~use things again~~   ride a bicycle   cars

electricity   ~~food~~   water

GRAMMAR
How Many/How Much

How much water do you use every day?

How much meat do you eat every day?

How many clothes do you buy every month?

How many plastic bags do you use every day?

7 **Circle *many* or *much* in each question. Then fill in the blanks.**

1. How many (much) food do you eat every day?

I eat about _____ grams of food every day.

2. How many / much electricity do you use every day?

I use electricity for about _____ hours every day.

3. How many / much times do you use public transportation every week?

I use public transportation _____ times every week.

4. How much / many waste do you create every day?

I create about _____ grams of waste every day.

5. How many / much water do you use to take a shower?

I use _____ liters of water to take a shower.

8 **Walk around class to ask and answer these questions with your classmates.**

9 Make small groups. Look at the chart and write 1 to 2 ideas about food, clothes, water, and transportation to reduce your ecological footprint. After you finish, present your chart to the class or other groups.

Action Plan to Reduce Ecological Footprint

WE CAN REDUCE OUR ECOLOGICAL FOOTPRINT IF WE:

1. _____ _____ _____	1. _____ _____ _____	1. _____ _____ _____	1. *Take public* *transportation.* _____
2. _____ _____ _____	2. _____ _____ _____	2. _____ _____ _____	2. _____ _____ _____

✏️ WRITING

Reducing My Ecological Footprint with My Family

10 **Answer the questions by finishing the sentences below. Share your answers with your classmates.**

1. How do people create their ecological footprint?

    People _____

    _____

2. How can your family reduce their ecological footprint?

    My family can _____

    _____

WORD WALL

Make a word wall on the poster and write all the new words you have learned in this unit.

PROJECT

Saving Water

1 **At home, notice how much water you use. Try to turn off the water when you brush your teeth and wash dishes. Try to take a short shower.**

2 Calculate how many liters of water you saved. Bring the results to class. TM

3 In class, fill out the chart with the help of your teacher. The first row is an example.

WATER SAVED BY OUR CLASS			
Student	How many liters of water saved	In how many days	How many liters saved per day
Armen	3	6	0.5
All students			

4 Discuss the following questions:

1. How much water can our class save in a year?
2. How much water can a million people save, if they follow your example?
3. What steps can we take to save water?

VOCABULARY

Words Describing Reduce, Reuse, Recycle

1   **Learn the words with your teacher.**

TM   TS

reduce

reuse

recycle

paper

ride a bike

copybook

electricity

2 Make small groups and stand in a circle. Choose a student to stand in the center of the circle. Ask the student to close her eyes, spin around and point at the person she is facing. That person should look at the teacher's slides and match a verb with a noun.

Example from the slides:

REDUCE	REDUCE
a. bottle	a. bottle
b. waste	→ ✓ b. waste
c. copybook	c. copybook

LISTENING
Reducing, Reusing, Recycling

3 Watch the slides. Listen and learn with your teacher.

READING
Reducing, Reusing, Recycling

4 Read about the importance of reducing, reusing and recycling.

The 3Rs

The 3Rs are **R**educe, **R**euse, and **R**ecycle. The 3Rs help people save natural resources and not make a lot of waste.

Reduce - do not use a lot of things. For example, you can walk or ride a bike and not go by car. You reduce the use of gasoline. You can turn off the TV and play with friends. You save electricity.

Reuse - use something several times. For example, when you get a bag from the shop, use it again next time.

Recycle - use old things to create new things. For example, people can recycle newspapers and make paper bags from them.

5 **Read the sentences below. Write *True* or *False* next to each sentence.**

1. People should reduce, reuse, and recycle so there is not much waste. _True_

2. Turning off the water tap when brushing your teeth is an example of reduce. _____

3. Making a paper bag from old newspapers is an example of recycle. _____

4. Using the same bag for shopping is an example of reuse. _____

5. People should walk or ride a bike and not go by car to save gas. _____

6. If people reduce, reuse, and recycle, there is less waste on Earth. _____

GRAMMAR
Past Simple with Regular Verbs

AFFIRMATIVE	NEGATIVE	
	LONG FORM	**SHORT FORM**
I *used* water.	I ***did not*** *use* water.	I ***didn't*** *use* water.
We *used* water.	We ***did not*** *use* water.	We ***didn't*** *use* water.
They *used* water.	They ***did not*** *use* water.	They ***didn't*** *use* water.

6 **Fill out sentences with the past simple of the verbs in the box. Then, based on the picture, write *True* or *False* next to each sentence.**

> destroy   reuse   fix   turn off   plant   ~~pollute~~

1. Yesterday, I *polluted* water with too much soap.   *False*

2. Last year, my friends _____ a tree.   ——

3. Last summer, we _____ a plant.   ——

4. Last week, I _____ the water tap   —— when brushing my teeth.

5. Last week, I _____ the same plastic   —— bag to go shopping.

6. Yesterday, my mother and I _____ the leaking   —— faucet.

7 Describe Mary's last week using past simple forms of the verbs and negative *not*. Then draw a happy or sad face next to each sentence to show a good or bad impact on the environment.

1. Last Monday, Mary *did not use*_____ too much water to wash dishes. (not/use) ☺

2. Last Tuesday, Mary _____ a lot of waste. (not/create)

3. Last Wednesday, Mary _____ plants. (not/destroy)

4. Last Thursday, Mary _____ a plastic bottle. (not/recycle)

5. Last Friday, Mary_____ the TV for 10 hours. (not/turn off)

SPEAKING
Giving Solutions

8 Make small groups. Look at the chart on the next page. Think about your ecological footprint. Think of things that you use a lot. Write the names of those things in the chart. Then suggest ideas to reduce, reuse, or recycle those things. After you fill in the chart, present it to the class or other groups.

THING	REDUCE	REUSE	RECYCLE
1. Plastic bags	1. do not take them from shops	1. use the same plastic bag many times	1. make one strong shopping bag from many plastic bags
2.	2.	2.	2.
3.	3.	3.	3.

WRITING
Reflecting on the Past Week

9

Write 4-5 sentences about good things you did last week for the environment. Use past simple and the words in the box.

> clean   pollute   save   turn off   destroy   use
>
> overuse   create   recycle   reuse   reduce

Examples: *Last Monday, I reused a plastic bag. On Tuesday, I did not pollute streets with trash.*

_____

_____

_____

_____

_____

_____

_____

_____

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

PROJECT

Collecting Paper for Recycling

1   **Do not throw away used paper. Recycle it! We can use recycled paper to make newspapers, magazines, toilet rolls, envelopes, milk cartons, and other boxes. Find these things in the picture.**

2   **Let`s collect used paper and recycle it.**

STEP 1   Collect used paper from your family.

STEP 2   Collect used paper from your neighbors.

STEP 3   Collect used paper from your school.

STEP 4   Take the collected paper to a recycling center with your teacher.

STEP 5   Calculate how many trees and how much water and electricity you saved.

1000 kg of recycled paper can save:

- 17 trees, or
- 26 000 liters of water, or
- electricity for 150 homes for one day

Let`s Review

1   **Let`s play bingo and review vocabulary. The teacher will give you a chart. Look at the pictures in the slides and find the word or phrase in your chart. Put a bean on the word if you find it.**

2   **Answer the questions.**

1. Name three renewable and three non-renewable resources.

Renewable _____

Non-renewable _____

2. Name two ways to save water, animals, and plants.

Water _____

Animals _____

Plants _____

3. Name three things that add to your ecological footprint.

1. _____

2. _____
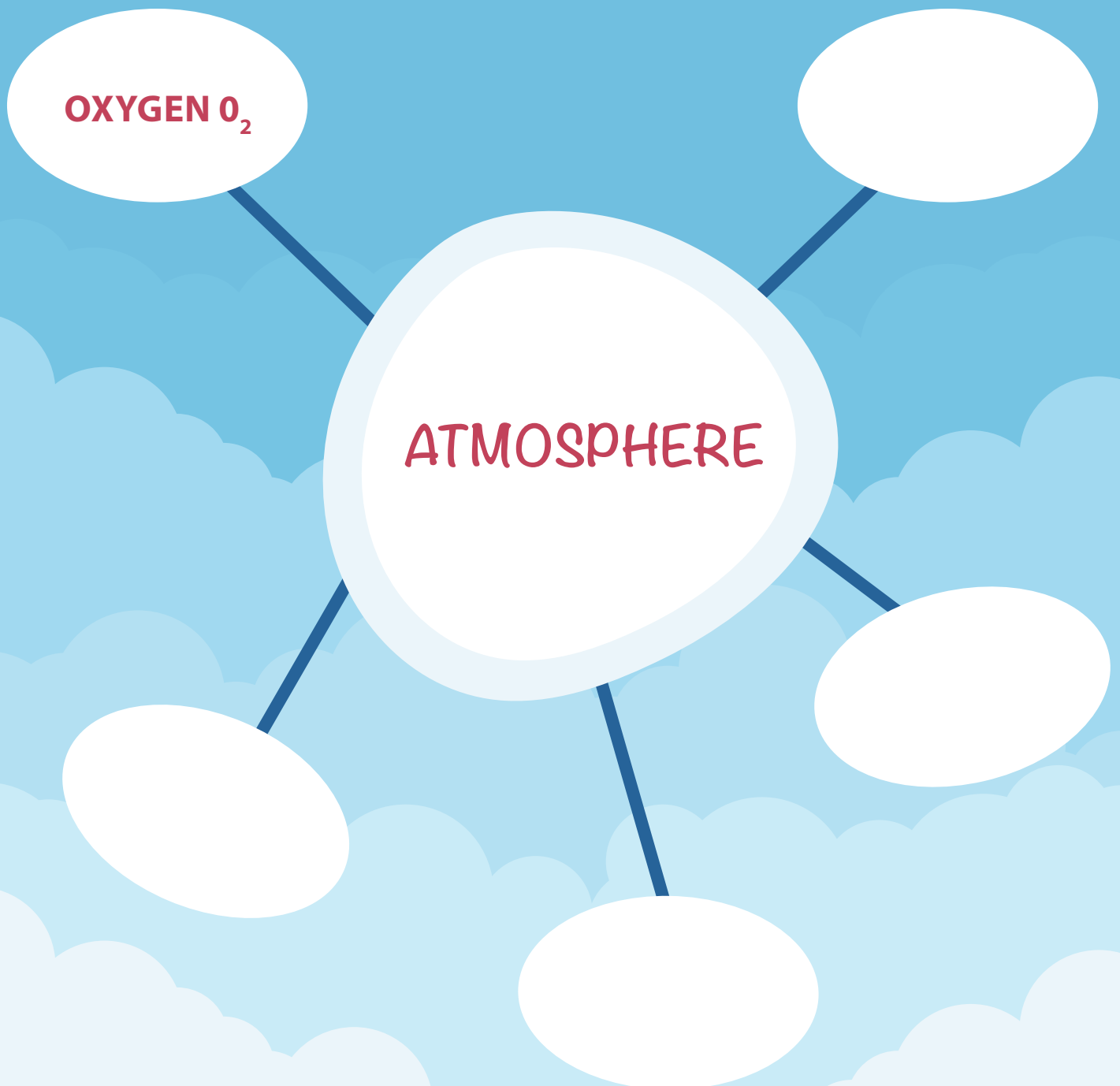
3. _____

There are different gases in the atmosphere.
Which gas can people and other animals breathe in?

OXYGEN 0$_2$

ATMOSPHERE

VOCABULARY
Words Describing the Atmosphere

1 Learn the words with your teacher.

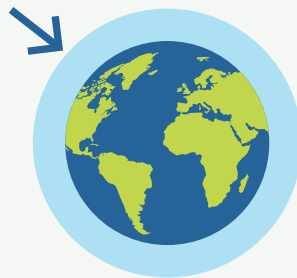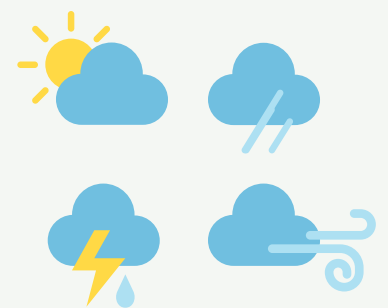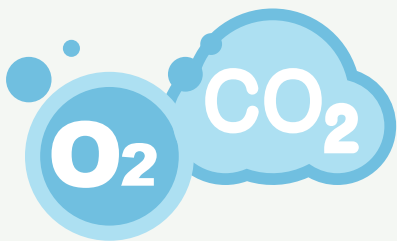TM   TS

2 Match the words in the box with the pictures.

carbon dioxide
atmosphere
gases
climate
oxygen

1. _____

2. _____

3. _____

4. _____

5. _____

| 3 | **Watch the slides. Listen and learn with your teacher.** | TM | TS |

READING

The Earth's Atmosphere

| 4 | **Read about the Earth`s atmosphere.** |

The Earth`s Atmosphere

There are a lot of gases on Earth. A layer of gases around the planet Earth is called atmosphere. One gas is oxygen. Oxygen is a very important gas because people and other animals breathe it. Without oxygen, people and other animals could not live on Earth. There is also carbon dioxide in the atmosphere. Carbon dioxide is very important for trees and other plants. Trees and other plants take in carbon dioxide and give out oxygen for people and other animals to breathe.

Atmosphere is also important because it keeps the Earth`s temperature warm for people and other living things. But people pollute the atmosphere a lot. Polluting air is very bad. It can cause a lot of problems for people and the planet.

5 **Read the sentences below. Write *True* or *False* next to each sentence.**

1. There are no gases on Earth. *False*
2. There is carbon dioxide in the atmosphere. _____
3. People and other animals need a lot of carbon dioxide. _____
4. Trees and other plants give off oxygen. _____
5. Air pollution creates problems. _____

GRAMMAR
"What" Questions in Present Simple

QUESTION	ANSWER
What do you do to not pollute the air?	I do not burn trash or leaves.
What do you do to save water?	I take short showers.
What do you do to save electricity?	I turn off the TV when sleeping.
What do you do to not pollute water?	I use little dishwashing soap.

6 **Put the words in the right order to make questions.**

1. do   to save   you   do   What   water _____

   What do you do to save water? _____

2. you   to save   do   electricity   do   What _____

   _____?

3. you   not   do   to waste   water   do   What _____

   _____?

4. to recycle   you   do   paper   do   What

_____?

5. do   not   you   to waste   electricity   What   do

_____?

SPEAKING

Asking and Answering about Solutions

7 **Work with a classmate. Put your flashcards face down on the table. Take a flashcard, read the phrase and ask your classmate a question. Your classmate should answer the questions from the options below. Take turns to give questions and answers.**

Save water

Question
What do you do to save water?

Answer
I turn off the water tap when I brush my teeth.
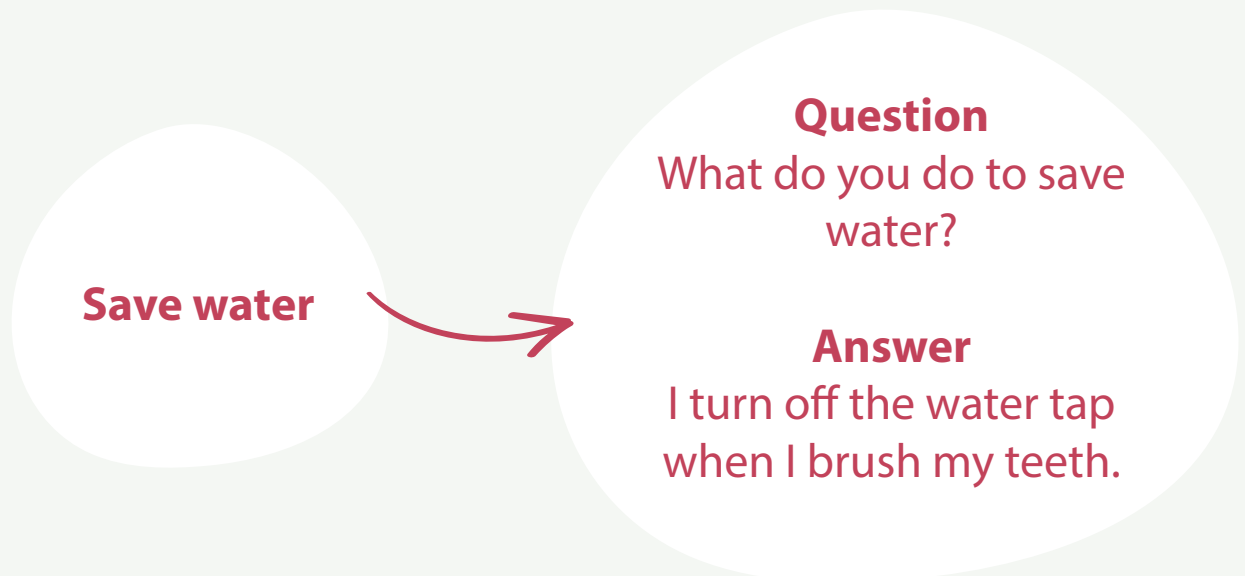
Answer options:

☐ I turn off the water tap when I brush my teeth.
☐ I turn off the TV when I am not using it.
☐ I don't use too much dishwashing soap.
☐ I walk or ride a bicycle.
☐ I reduce, reuse, and recycle.
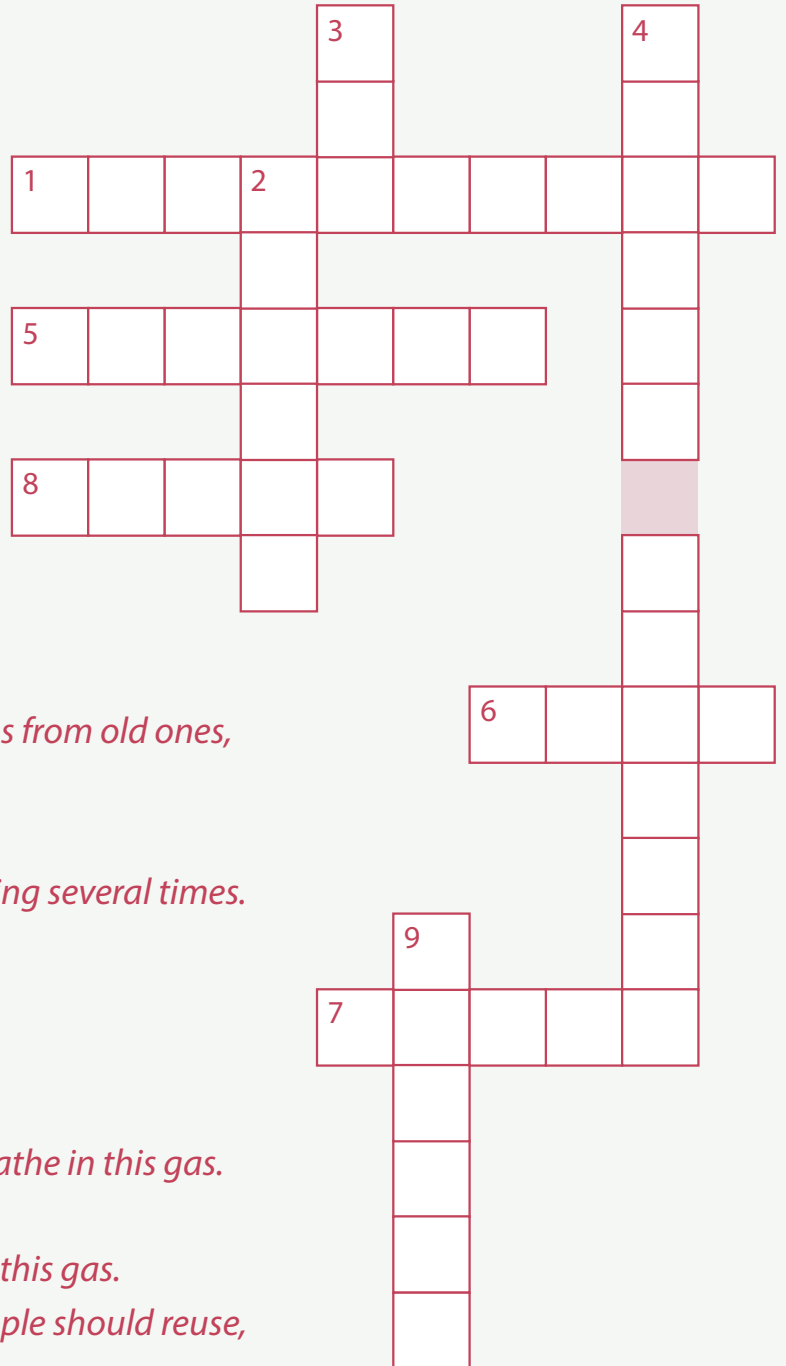☐ I recycle paper.
☐ I don't buy too many things.

WRITING
 Solving a crossword puzzle

8 **Work in small groups to solve the crossword.**

ACROSS

1. *There are a lot of gases in it.*
5. *When people make new things from old ones, they...*
6. *People eat it every day.*
7. *When people use the same thing several times.*
8. *People drink it every day.*

DOWN

2. *People and other animals breathe in this gas.*
3. *The atmosphere is made of it.*
4. *Trees and other plants take in this gas.*
9. *To save natural resources, people should reuse, recycle and …*

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

VOCABULARY
Words Describing Air Pollution

1 **Learn the words with your teacher.**

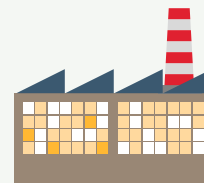TM   TS

smoke
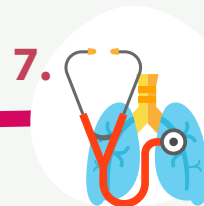

fireworks

transportation

coal

disease

factory

2 **Make groups of three. Flip a coin. If you get heads, move 1 circle ahead. If you get tails, move 2 circles ahead. When you are on a picture, name the picture.**

START

1.

2.

3.

4.

5.

9.

8.

7.

6.

10.

11.

12.

FINISH

GRAMMAR
More/Less

MORE	LESS
more forest ☺	*less* forest ☹
more coal ☺	*less* coal ☹
more clean air ☺	*less* pollution ☺
more clean water ☺	*less* clean water ☹

3 **Read the sentences. Fill in the gaps with *more* or *less*.**

1. There is <u>*less*</u> pollution if people reuse plastic bags.
2. There is <u>*more*</u> oxygen if people plant a lot of trees.
3. There is _____ fresh water if people save it.
4. There is _____ air pollution if people use public transportation, ride bicycles, or walk.
5. If people burn _____ fuel, they can breathe clean air.
6. If we recycle paper, we save _____ trees.

READING
Air Pollution

4 **Read about air pollution on Earth.**

Air Pollution

Pollution makes nature dirty. Oceans, rivers, seas, and forests become dirty as a result of pollution. The smoke from factories, transportation, wild fires, and burning fossil fuels creates pollution.

smoke from factories

smoke from transportation

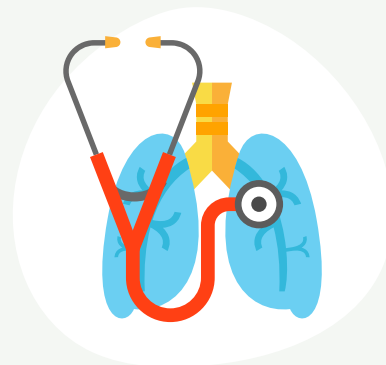**smoke from burning wood**

smoke from burning coal

cutting down trees

Trees are very important. They take in carbon dioxide and give out oxygen. We should protect trees so they can take in carbon dioxide and give off more oxygen.

Because of air pollution, people can get a lot of diseases, for example:

skin diseases

asthma

To reduce air pollution, we should:

plant more
trees

reduce smoke
from factories

use less polluting
forms of
transportation

use fewer
fireworks

burn less wood,
coal, and oil

5   **Read the sentences below. Write *True* or *False* next to each sentence.**

1. Oceans, rivers, seas, and forests do not become dirty as a result of pollution. *False*

2. Trees take in carbon dioxide and give out oxygen. _____

3. To reduce air pollution, people need to plant more trees. _____

4. To make air less dirty, people need to drive more cars. _____

5. Air pollution cannot cause diseases. _____

6. Air pollution happens because of a lot of factories and polluting forms of transportation. _____

SPEAKING
Avoiding Air Pollution

6 **Make small groups and choose one or two problems about air pollution:**

1. Cutting down too many trees
2. Too much smoke from factories
3. Too much smoke from transportation
4. Too much smoke from burning oil, gas, coal
5. Too much smoke from burning wood or trash

Give examples of what people should do to avoid such problems. Fill in the chart below. After you finish, present your solutions to the class or another group.

PROBLEM	SOLUTIONS
1.	1.
2.	2.

7   **Watch the video about air pollution.**
ace.aua.am/ourplanet

8   **Based on the video, match the pictures with the words from the box.**

> plant trees   skin disease   cutting down trees   ~~cancer~~
> burning wood   use public transportation   asthma
> ~~burning coal~~   ~~reduce smoke from factories~~

1. Air gets dirty because of:
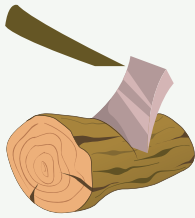
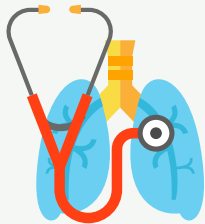
1. _____

2. *burning coal*

3. _____

2. Because of air pollution, people can have diseases:

1. _____

2. *cancer*

3. _____

3. To reduce air pollution, people should:

1. _____

2. *reduce smoke from factories*

3. _____

✎ WRITING
Relfecting on the Past Week

9 **Write 4-5 sentences about good things you did last week for the environment. Use past simple and the words in the box.**

> clean   pollute   save   turn off   destroy   use
> overuse   create   recycle   reuse   reduce
> plant   burn   watch

Examples: _Last Monday, I watched less TV. On Tuesday, I did not use polluting forms of transportation._

_____

_____

_____

_____

_____

_____

_____

_____

| Monday |
| Tuesday |
| Wednesday |
| Thursday |
| Friday |
| Saturday |
| Sunday |

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

VOCABULARY
Words Describing the Greenhouse Effect

1 **Learn the words with your teacher.**
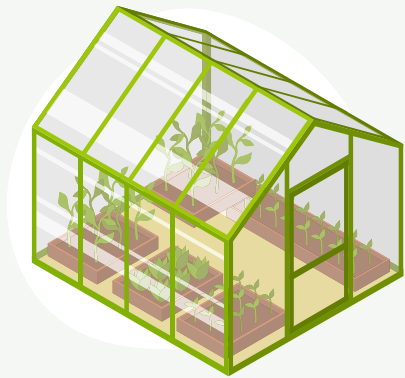
TM   TS

greenhouse

heat

roof
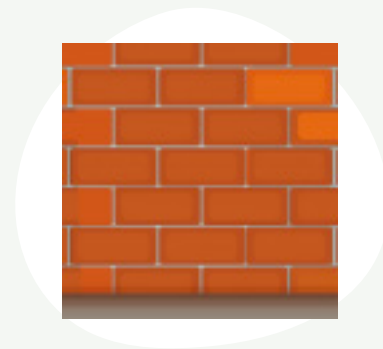
wall
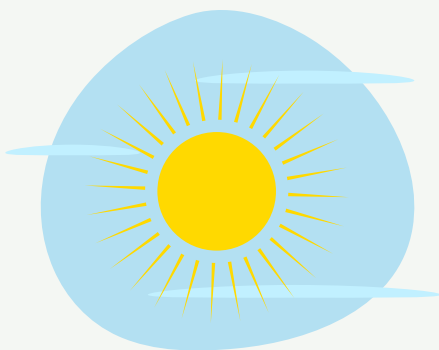
sun

factory

2 Watch the slides. Listen and learn with your teacher.

TM   TS

READING
The Greenhouse Effect

3 Read about the greenhouse effect.

Greenhouse Effect

A greenhouse is a house with glass walls and a glass roof. Because of the heat from the sun, a greenhouse is very warm.

The greenhouse can be warm in summer and in winter. The Earth`s atmosphere is like the greenhouse. Gases in the atmosphere such as carbon dioxide, keep the Earth warm. This process is the greenhouse effect.

But when there is too much carbon dioxide and other greenhouse gases in the atmosphere, the greenhouse effect becomes very strong. The Earth becomes very warm.
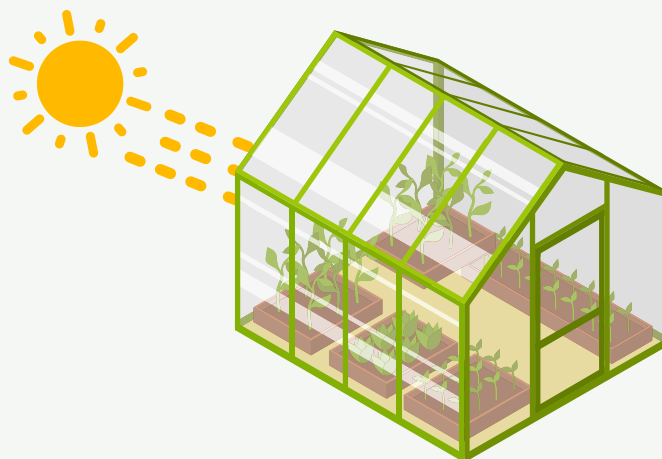
Greenhouse

The yellow color in this picture shows the heat because of carbon dioxide and other greenhouse gases. People heat the atmosphere too much. People burn too much gas and coal. People have a lot of factories and polluting forms of transportation. They create too much carbon dioxide and other greenhouse gases.

People burn forests and cut down a lot of trees. Trees take in carbon dioxide. Too much heat from the greenhouse effect is very bad. It can cause a lot of problems. People should stop releasing too much carbon dioxide.

Greenhouse gases in the atmosphere

4 **Make small groups and fill in the chart based on the reading text.**

The Greenhouse Effect

GREENHOUSE	GREENHOUSE GASES
1. _A greenhouse keeps the heat from the_ _____	1. _There are gases in the atmosphere._ _One of them is_ _____
2. _In a greenhouse, the heat does not_ _____	2. _Greenhouse gases keep the Earth_ _____
3. _A greenhouse is warm even during_ _____	3. _There is a lot of carbon dioxide in the_ _atmosphere if_ _____

GRAMMAR
When

WHEN...

- o   **When** the sun's heat goes into a greenhouse, it becomes very warm.
- o   **When** the sun`s heat goes into the atmosphere, the Earth becomes warm.
- o   **When** people burn gas, they release too much carbon dioxide.
- o   **When** people burn wood, they release too much carbon dioxide.

5   **Make one sentence out of two using _when_.**

1.   People burn coal. They release too much carbon dioxide.

<u>When</u> people burn coal, they release too much carbon dioxide.

2.   People use a lot of factories. They release too much carbon dioxide.

_____ _people use a lot of factories, they release too much carbon dioxide._

3.   People use a lot of polluting forms of transportation. They heat the atmosphere too much.

_____ _people use a lot of polluting forms of transportation, they heat the atmosphere too much._

4. People use a lot of electricity. They make the greenhouse effect very strong.

    _____ *people use a lot of electricity, they make the greenhouse effect very strong.*

5. People cut down a lot of trees. There is less clean air for people and other animals to breathe.

    _____ *people cut down a lot of trees, there is less clean air for people and other animals to breathe.*

WRITING
Reducing Greenhouse Gases

6 **Write down ideas to reduce greenhouse gases. Use *when* in your sentences. When you finish, present it to your classmates.**

When I turn off lights, I reduce greenhouse gases.

_____

_____

_____

_____

_____

_____

_____

SPEAKING
Describing the Greenhouse Effect

7   **Listen to your teacher and watch the slides. After you learn more about greenhouse gases, fill in the gaps.**

1. One of the greenhouse gases is _____.

2. Greenhouse gases keep the Earth _____.

3. If there are no greenhouse gases, the Earth will be very _____

_____

8   **Make small groups. Think of two ways that people heat the atmosphere. Draw one picture for each idea, then write a sentence to describe it. After you finish, present it to the class or other groups.**

1.

2.

9 | **Let`s play Tic-Tac-Toe. Draw the chart on the board. Make two groups. Take one of the colorful papers. After your teacher asks a question, raise the colorful paper if you know the answer. The group that completes one row wins. See the example below.**

WORD WALL
Make a word wall on the poster and write all the new words you have learned in this unit.

PROJECT
Catching Air Pollution

1 | **To make a pollution catcher, you will need:**

a piece of cardboard

a piece of yarn

petroleum jelly (vaseline)

2 | **Make an air pollution catcher.**

STEP 1 Make two close holes at the top of the cardboard.
STEP 2 Put the piece of yarn through the holes and tie.
STEP 3 Add petroleum jelly on one side of the cardboard and spread it all over the entire side.

3 | **Do the experiment and discuss it with your classmates.**

1. Hang the pollution catcher somewhere for a week to catch pollutants.

2. After one week, bring the cardboard to class. Tell your classmates how much your air is polluted.

VOCABULARY
Words Describing Global Warming

1 **Learn the words with your teacher.**   TM   TS

2 **Fill in the missing letters.**

1. dr__ug__t

2. fl__ __d

3. wi__df__r__

4. i__e

5. s__a

6. gl__bal wa__min__

LISTENING
Global Warming

3 **Watch the slides. Listen and learn with your teacher.**   TM   TS

4 **Read about global warming.**

Global Warming

The atmosphere of the Earth is becoming warmer and warmer. Too much carbon dioxide and other greenhouse gases make the Earth warmer.

When there are a lot of these gases, they trap more heat from the sun and make the Earth warmer. We call it ***global warming***. Global warming is very bad. Because of global warming, oceans become warmer and sea ice starts to melt.

Look at these pictures. Do you see any difference?

1979, at the end of summer

2015, at the end of summer

This is the Arctic sea ice. This ice melts more and more every year. When ice melts, the sea level goes up. Too much water creates floods. A lot of land goes under water.

Global warming can also create drought and wildfires. Global warming can also be a threat to people and other animals.

drought

threat to animals

wildfires

5 **Choose the right answers.**

1. What is global warming?
    a. When the Earth becomes hotter.
    b. When the Earth becomes colder.
    c. When Earth's temperature does not change.

2. Why do greenhouse gases cause global warming?
    a. Because they don`t catch the heat from the sun.
    b. Because they catch the heat from the sun.
    c. Because the sun is too hot.

3. Name one of the gases that causes global warming.
    _____
    _____

4. Name four problems that global warming can cause.
    _____
    _____

SPEAKING

Solutions to Global Warming

6 **Notice what problems global warming has caused. After you observe, answer the questions below.**
bit.ly/climate-time-machine

TM

1. Has Earth become a warmer or colder place to live in?
2. Is there too much or too little carbon dioxide in the atmosphere?
3. Is a lot of carbon dioxide in the atmosphere good or bad?
4. Can there be floods because of global warming?
5. Can a lot of ice melt because of global warming?

7 **Write ways to reduce global warming below. After you finish, compare your answers with a partner.**

WAYS TO REDUCE GLOBAL WARMING

1. *People should turn off electricity when they are not using it.*

2. _____

3. _____

4. _____

GRAMMAR
Past Simple with Irregular Verbs

AFFIRMATIVE	NEGATIVE	
	LONG FORM	**SHORT FORM**
I *took* a short shower.	I *did not take* a short shower.	I *didn't take* a short shower.
We *took* a short shower.	We *did not take* a short shower.	We *didn't take* a short shower.
They *took* a short shower.	They *did not take* a short shower.	They *didn't take* a short shower.

8 **Match the present forms with past forms of the irregular verbs in the table.**

1. take   a. **got**

2. cut   b. became

3. **get**   c. made

4. become   d. caught

5. make   e. drank

6. catch   f. bought

7. drink   g. took

8. buy   h. cut

9 Complete the sentences with a verb from the box in past simple. Then make the sentences negative.

> make   cut down   ride   ~~drink~~   take   buy   get

1. I _drank_____ water an hour ago.
   _I didn`t drink water an hour ago._____

2. I _____ a shower yesterday.
   _____

3. I _____ a fire last week.
   _____

4. I _____ clothes last month.
   _____

5. I _____ a tree last year.
   _____

6. I _____ sick last week.
   _____

7. I_____ a bike to school last spring.
   _____

WRITING

Reflecting on the Past Week

10 **Write 4-5 sentences about good things you did last week for the environment. Use past simple and the words in the box.**

> get   plan   burn   ride   take   cut down
> buy   make   drink

Examples: *Last Monday, I rode a bike and did not take a bus. On Tuesday, I didn't take a long shower.*

_____

_____

_____

_____

_____

_____

_____

| Monday |
| Tuesday |
| Wednesday |
| Thursday |
| Friday |
| Saturday |
| Sunday |

WORD WALL

Make a word wall on the poster and write all the new words you have learned in this unit.

PROJECT
Cleaning the Streets

1 **Learn the words with your teacher.**

2 **For clean-up, you need:**

trash bag

broom

dustpan

gloves

trash

dumpster

3 **Clean-up project:**

STEP 1 Choose a place to clean up in your community.

STEP 2 Choose a day and time for the community clean-up.

STEP 3 Invite family, friends, neighbors, and classmates.

STEP 4 Bring trash bags, gloves, brooms, and dustpans to the clean-up place.

STEP 5 Pick up trash with gloves. Be careful with glass.

STEP 6 Take the full trash bags to the dumpsters.

STEP 7 Take photos and share them.

Let`s Review

1   **Form six groups. Each group will research one topic. Write information about your topic in the chart below.**

The topics are:

1. Biomes and ecosystems
2. Natural resources
3. Ecological footprint

4. The atmosphere
5. Greenhouse effect
6. Global warming

For example

TOPIC	PROBLEM	HOW I CAN HELP
Biomes and ecosystems	1. People cut down a lot of trees and other plants and destroy forests. Many animals lose their homes. 2. People pollute water too much.	1. I should not cut down trees and other plants. I should plant new trees. 2. I should not pollute water with trash. I should use less dish washing soap.

TOPIC	PROBLEM	HOW I CAN HELP

For Notes