OUR PLANET

TEACHER'S MANUAL

A Note to the Teacher

Our Planet is accompanied with the following additional resources:

- 1) Teacher's Manual (TM)
- 2) Teacher's Slides (TS)

The **Teacher's Manual** includes additional instructional materials such as printouts and answer key.

The **Teacher's Slides** accompany vocabulary and listening activities where the teacher is expected to show the visuals and tell the suggested text in quotes. The listening texts are followed by post-listening activities.

To download the Teacher's Manual and Teacher's Slides, please visit ace.aua.am/ourplanet.

TABLE OF CONTENTS

UNIT 1 The Earth's Surface

1.1 Biomes of the world	4
1.2 Living things and non-living things	6
1.3 Ecosystems	8
1.4 Human impact on the Earth	1
UNIT 2 The Earth`s Natural Resources	
2.1 Renewable and non-renewable natural resources	25
2.2 Overusing natural resources	27
2.3 Ecological footprint	29
2.4 Reduce, reuse, recycle	32
UNIT 3 The Earth's Atmosphere	
3.1 Atmosphere	42
3.2 Air pollution	44
3.3 The greenhouse effect	46
3.4 Global Warming	49

The Earth's Surface

UNIT 1.1

Biomes of the World

Do you know...?

➤ **Slide 4:** Ask students to look at the picture in the slide and describe the Earth.

Vocabulary | Words Describing Biomes

- Slide 5: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
- Give students enough time to write down the names of the biomes under the right pictures. Match the first picture with the right word in the box together with students to familiarize them with the format of the exercise.

Listening | Biomes of the World

- Slides 6-10: When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - > **Slides 11-12:** Ask students to name the pictures in the slides.

Reading | Biomes of the World

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Give students enough time to answer the True/False questions based on the reading text.

 Answer the first question together with students to familiarize them with the format of the exercise.

Grammar | There is/ There are

- Give students enough time to read and circle the right answers. Model the activity by circling the right answer in the first sentence together with students to familiarize them with the format of the exercise.
- Give students enough time to fill in the gaps with *there is* or *there are* and then write the name of the biome. Describe the first picture together with students to familiarize them with the format of the exercise.

Speaking | Guessing the Biome

Ask students to pair up and give each student a flashcard of a biome. Ask students to take turns to describe and guess the biome.

Cut and distribute the flashcards. (See the Printouts section)

Writing | Describing the Planet Earth

Watch the video and give students enough time to describe the world by completing the sentences. Complete the first sentence together with students to familiarize them with the format of the exercise.

Visit ace.aua.am/ourplanet to access the video.

Word Wall

Note:

Put a poster on the wall and have students write down all the new words they learn from this unit. At the end of the class give each student enough time to write 1-2 words on the poster.

Vocabulary | Words Describing Living and Non-living Things

Explain the meaning of "eat", "breathe", and "grow" to students by acting them out. Ask 1 students to stand up. Say the words randomly and have them use their bodies to act out "eat", "breathe", and "grow".

Listening | Living and Non-living Things

- ➤ **Slides 14-15:** When reading the text for each slide, stress the key words illustrated 2 in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - > **Slide 16:** Ask students to look at the pictures in the slides and say if the illustrations are living or non-living things.
- Give students enough time to read the questions and answer them individually. After 3 students are ready, discuss the questions as a class.

Reading | Living and Non-living Things

- Read the text together with students as a class. Read the text passage by passage to explain 4 difficult concepts and unknown words.
- Give students enough time to sort out living and non-living things by filling in the chart. 5 Sort out the first word together with students to familiarize them with the format of the exercise.

Writing | Finding Living and Non-living Things

Give students enough time to find living and non-living things in the classroom, make 6 sentences with "I see" and "there is/there are" and share them with their classmates. Make two sentences together with students to familiarize them with the format of the exercise.

Grammar | Can/Cannot

Give students enough time to describe what they can do and what the objects in the pictures cannot do by making sentences with "can" and "cannot". Make two sentences together with students to familiarize them with the format of the exercise.

Speaking | Describing and Guessing a Biome

Ask students to make small groups and give each group a flashcard of a biome. Ask the groups to find living and non-living things in the biomes. Give students enough time change their groups and describe and guess the biomes.

Cut and distribute the flashcards. (See the Printouts section)

Word Wall

At the end of the class give each student enough time to write 1-2 words on the poster.

Vocabulary | Words Describing Ecosystems

- Slide 18: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
- Give students enough time to match the pictures with the words in the box. Match the first picture with the right word together with students to familiarize them with the format of the exercise.
- Give students enough time to put the letters in the right order to make words. Make the first word together with students to familiarize them with the format of the exercise.

Listening | Ecosystems

- Slides 19-21: When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - > **Slide 22:** Ask students to watch the slide and explain why the living things can or cannot live in the given biomes.

Reading | Ecosystems

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Ask students to make small groups. Give them enough time to answer the questions and share them with other groups. Answer the first question together with students to familiarize them with the format of the exercise.

	Grammar Because of
7	Give students enough time to make one sentence out of two using <i>because of</i> . Make the first sentence together with students to familiarize them with the format of the exercise.
	Speaking Describing Ecosystems
8	➤ Slide 23: Ask students to pair up and discuss the ecosystem in the slide by answering the questions. After students finish, discuss the questions as a class.
	Writing Creating an Ecosystem
9	Ask students to make groups. Give the groups enough time to think and draw a big or small ecosystem in their region.
10	Give students enough time to list the living and non-living things in their ecosystems and use the list to describe their ecosystems to another group. Ask students to keep their drawings for the next class.
	Word Wall
	At the end of the class give each student enough time to write 1-2 words on the poster.
	Project Planting Trees
1	➤ Slide 24: Ask students to repeat the words for the pictures in the slide after you. After students can say the words confidently, remove the words and ask students to name the pictures.
2	Give students enough time to read the steps for planting a tree and number them in the right order. Number two steps together with students to familiarize them with the format of the exercise.

To plant trees, you need to:

- decide upon the planting site with students/school administration/community
 leaders
- prepare all the materials beforehand: shovels, gloves, water, and trees. Discuss how to get the materials with students.
- divide students into groups, assign a role to each student and select a planting site for each group. Follow the steps in the book to plant the trees.

Vocabulary | Words Describing Human Impact on the Earth

- Slide 26: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
- 2 Ask students to make small groups. Give them enough time to play the game.
- Give students enough time to match the verbs with the nouns in the box. Match the first verb with a noun in the box together with students to familiarize them with the format of the exercise.

Listening | Environmental Problems

- Slides 27-29: When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - ➤ **Slide 30:** Ask students to look at the pictures in the slide and name how people harm the environment.

Reading | Human Impact on the Environment

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Give students enough time to fill in the chart with causes based on the reading text. Fill in the first cause together with students to familiarize them with the format of the exercise.

	Writing Naming Environmental Problems
7	Watch the video and give students enough time to match the words with the pictures. Match the first word with the right picture together with students to familiarize them with the format of the exercise.
	Visit ace.aua.am/ourplanet to access the video.
	Grammar Should/Should not
8	Give students enough time to fill out the sentences using <i>should</i> or <i>should not</i> with one of the phrases in the box. Fill out the first sentence together with students to familiarize them with the format of the exercise.
	Speaking People and the Environment
9	Ask students to make small groups. Give them enough time to fill in the chart based on their drawings of the ecosystems from the last class and present it to other groups. Fill in the first "problem" and "solution" together with students to familiarize them with the format of the exercise.
	Word Wall
	At the end of the class give each student enough time to write 1-2words on the poster.
	Project Conducting a Survey
1	Discuss the survey content with students and change it if it is necessary. Add other existing environmental problems in the survey that students can think of. Ask students to conduct the survey among their neighbors and bring the survey results to the next class. You can use the Armenian translation of the survey to help students. (<i>See the Printouts section</i>)
2	Draw the chart on the board. Ask 2-3 students to come to the board at a time and fill in the

chart by putting a check (\checkmark) or a cross (X) under each problem. If the problem exists, ask

them to put a check (\checkmark) under it. If it does not exist, ask them to put a cross (X) under it. After students fill in the chart, count the checkmarks and crosses to know which problems are very serious and which are not. (See the Printouts section)

Discuss the questions together with students based on the survey results. Encourage them to suggest solutions to each problem.

Let's Review

- Give students enough time match the words in the box with the pictures. Match the first word with the right picture together with students to familiarize them with the format of the exercise.
- Divide students into two groups and tell them to stand in two lines. Explain you will say a word and they will take turns to run to the board and write down the word they hear. After the dictation, check the spelling.

A list of words to dictate: desert, tundra, people, kill, grow, plants, tree, die, animal, water, cut, smoke, ocean, pollute, eat, grassland, breathe, Earth

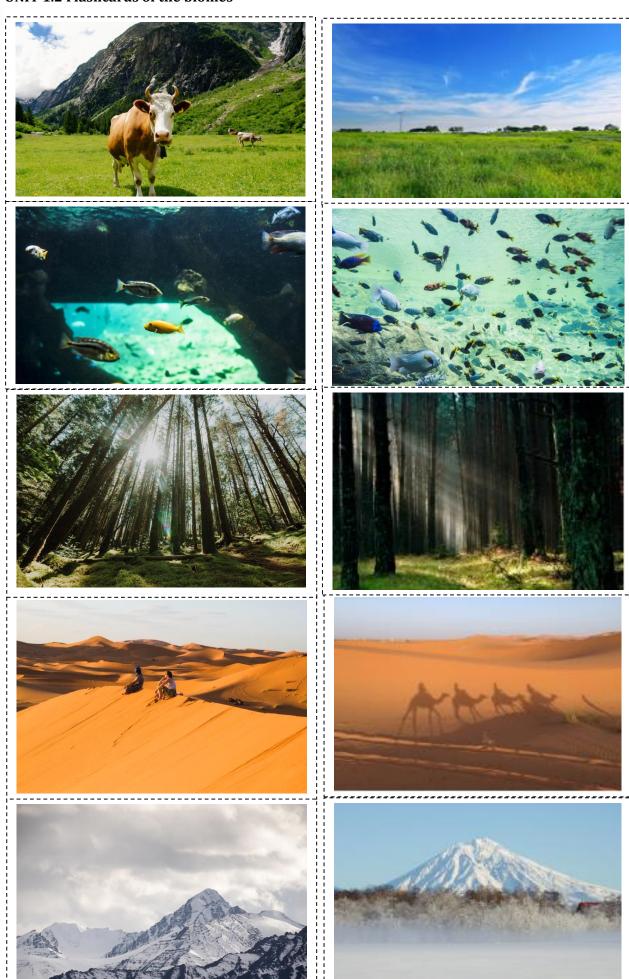
Give students enough time to complete the sentences with the right words. Complete the first sentence together with students to familiarize them with the format of the exercise.

UNIT 1.1 Flashcards of the biomes

Printouts







UNIT 1.4 Armenian translation of the survey

Հարգելի՛ հարևան,

Մենք անցկացնում ենք այս հետազոտությունը մեր դասի համար։ Խնդրում ենք տրամադրել մի քանի րոպե այն լրացնելու համար։ Շնորհակալություն։

Ի՞նչ բնապահպանական խնդիրներ կան Ձեր շրջանում.

- Ջրի աղտոտում` արդյունաբերության պատձառով (գետում, լձում, լձակում)
- ս Ջրի աղտոտում` աղբի պատձառով (գետում, լձում, լձակում)
- Օդի աղտոտում` գործարանների գործունեության պատձառով առաջացած ծխից
- Օդի աղտոտում` մեքենաների, բեռնատարների, կամ ավտոբուսների
 պատձառով
- Աղտոտված տարածք` աղբ նետելու պատձառով
- Խմելու ջրի պակաս
- Վայրի կենդանիների կամ թռչունների սպանություն
- Գետում, լձում, կամ լձակում սատկող ձկներ
- 🛮 Մեծ քանակությամբ ծառահատում
- ս Հողի աղտոտում

UNIT 1.4 Chart to draw on the board and fill in the survey results $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$

Water pollution from industry	Water pollution from trash or garbage	Air pollution from factory smoke	Air pollution from cars, trucks, or busses	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	Land pollution from trash or garbage

Answer Key for Unit 1.1

Vocabulary | Words Describing Biomes

a. water b. grassland c. tundra d. forest e. desert

Reading | Biomes of the World

- 5 1. True
 - 2. True
 - 3. False
 - 4. False
 - 5. True
 - 6. True
 - 7. True

Grammar | There is/There are

- - 2. is
 - 3. are

1. are

- 4. are
- i. ui
- 5. is6. are
- 7. are
- 8. is
- 9. are
- 10. is
- 7 1. There are 2. There are
 - Biome: This is a forest.
 - 1. there is
 - 2. there are

Biome: This is a water biome.

- 1. there are
- 2. there is

Biome: This is a tundra.

- 1. there are
- 2. there is

Biome: This is a desert.

- 1. there are
- 2. there are

Biome: This is a grassland.

Writing | Describing the Planet Earth

- 9
- 1. planet Earth
- 2. oxygen and food
- 3. biomes
- 4. water biomes, tundras, deserts, grasslands and forests
- 5. plants and animals
- 6. cold
- 7. hot or cold

Answer Key for Unit 1.2

Listening | Living and Non-living Things

- 1. animals, plants
 - 2. chair, book
 - 3. Non-living things cannot grow or breathe.
 - 4. Living things can eat breathe, and grow.

Reading | Living and Non-living Things

5 Living things: tree, animals

Non-living things: water, rocks, sand, car

Grammar | Can/Cannot

7 I can breathe. The chair cannot breathe.

I can eat. The chair cannot eat.

I can grow. The chair cannot grow.

I can breathe The books cannot breathe.

I can eat. The books cannot eat.

I can grow. The books cannot grow.

Answer Key for Unit 1.3

Vocabulary | Words Describing Ecosystems

- 2
- 1. small bear
- 2. climate
- 3. pond
- 4. ocean
- 5. sun
- 6. big bear
- 3
- 1. small
- 2. climate
- 3. big
- 4. pond
- 5. desert
- 6. plant
- 7. animal
- 8. water
- 9. sun
- 10. ocean

Reading | Ecosystems

- 6
- 1. a forest/tundra/grassland/water biome/desert
- 2. a pond
- 3. Yes, they are.
- 4. Yes, they can.
- 5. No, it cannot.

Grammar | Because of

- 7
- 1. Because of
- 2. Because of
- 3. Because of
- 4. Because of
- 5. Because of

Speaking | Describing Ecosystems

- 8
- 1. It is an ecosystem.
- 2. It is a big ecosystem.
- 3. Animals and plants are living things.
- 4. Water, rocks and sand are non-living things.
- 5. Yes, they need each other because without water, animals cannot live. Without sand or soil, plants cannot grow.

Project | Planting Trees

2

- STEP 1: Find a place for planting trees.
- STEP 2: Dig a hole with a shovel.
- STEP 3: Put the tree into the hole.
- STEP 4: Fill the hole with soil.
- STEP 5: Water the tree.
- STEP 6: Water the tree every other day for 3 months.
- STEP 7: After 3 months, water the tree weekly for two or more years.

Answer Key for Unit 1.4

Vocabulary | Words Describing Human Impact on the Earth

- 3 1. kill animals
 - 2. cut down trees
 - 3. clean water, clean oceans
 - 4. pollute oceans, pollute water

Reading | Human Impact on the Environment

- 6 1. People pollute water.
 - 2. People cut down trees.
 - 3. People pollute the air with cars and factories.

Writing | Naming Environmental Problems

- **7** 1. kill animals
 - 2. cut down trees
 - 3. pollute water

Grammar | Should/Should not

- 1. I should take short showers.
 - 2. I should not cut down trees and other plants.
 - 3. I should not buy a lot of clothes.
 - 4. I should not eat a lot of meat.
 - 5. I should plant trees.
 - 6. I should not watch a lot of TV.

Let's Review

- 1
- 1. pollute
- 2. tree
- 3. tundra
- 4. animals
- 5. plant
- 6. cut down trees
- 7. water
- 8. plastic bottle
- 9. desert
- 3
- 1. biomes
- 2. breath, grow
- 3. breathe, grow
- 4. non-living things
- 5. non-living things
- 6. the climate and food
- 7. should

UNIT 2

The Earth's Natural Resources

The Earth's Natural Resources

Ask students to make small groups. Give them enough time to brainstorm and write names of natural resources in the ovals. After students finish, ask them to say examples of natural resources. Discuss with students what a natural resource is and why people need natural resources.

UNIT 2.1

Renewable and Non-renewable Natural Resources

Vocabulary | Words Describing Natural Resources

- Side 33: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
 - > **Slides 34-36:** Ask students to look at the slides and name the pictures.

Listening | Renewable and Non-renewable Natural Resources

- Slide 37: When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - ➤ **Slide 38:** Ask students to look at the pictures and say if the illustrations are renewable or non-renewable resources.

Reading | Renewable and Non-renewable Natural Resources

Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.

4	Give students enough time to answer the True/False questions based on the reading text. Answer the first question together with students to familiarize them with the format of the exercise.
5	Give students enough time to find renewable and non-renewable resources and circle the right answers. Find the first two right answers together with students to familiarize them with the format of the exercise.
	Writing Naming Renewable and Non-renewable Resources
6	Give students enough time to think and write down examples of renewable and non-renewable natural resources in Armenia.
	Speaking Finding Renewable and Non-renewable Resources
7	Ask student to make small groups. Give them enough time to describe the biomes by filling in the chart using the word bank and then present them to their classmates. Describe a biome together with students to familiarize them with the format of the exercise.
	Grammar Present Simple: affirmative and negative
8	Give students enough time to look at the picture and complete the sentences with the correct form of the words in the box. Complete the first sentence together with students to familiarize them with the format of the exercise,
9	Give students enough time to fill in the gaps with the correct negative verbs. Ask them to use either long or short negative forms. Complete the first sentence together with students to familiarize them with the format of the exercise.

Word Wall

At the end of the class give each student enough time to write 1-2 words on the poster.

Vocabulary | Words Describing Overuse of Natural Resources

Give students enough time to match the words in the circle and square to make phrases.

Make a phrase together with students to familiarize them with the format of the exercise.

Listening | Saving Natural Resources

2

- ➤ **Slides 40-41:** When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - ➤ **Slide 42:** Ask students to look at the pictures and name two ways to save each natural resource.

Reading | Importance of Natural Resources

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Give students enough time to complete the sentences based on the reading text and share their answers with their classmates. Complete the first sentence together with students to familiarize them with the format of the exercise.

Speaking | Giving Solutions

- Ask students to make small groups. Give them enough time to draw three examples of how people overuse natural resources based on the reading text. Ask them to draw their examples in the chart in exercise 6.
- Give students enough time to fill in the chart with problems and solutions based on their drawings and present it to the class or other groups. Name the first problem and suggest solutions to it together with students to familiarize them with the format of the exercise.

Grammar | If

Give students enough time to make one sentence out of two using *if*. Make the first sentence together with students to familiarize them with the format of the exercise.

Writing | Saving Natural Resources

Give students enough time to sort out renewable and non-renewable resources and describe how people overuse each of the natural resources. Sort out the first two natural resources together with students and describe how people overuse them to familiarize students with the format of the exercise.

Word Wall

At the end of the class give each student enough time to write 1-2 words on the poster.

	Vocabulary Words Describing Ecological Footprint
1	Give students enough time to match the words with the pictures. Match the first word with the right picture together with students to familiarize them with the format of the exercise.
	Reading Ecological Footprint
2	Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
3	Give students enough time to mark what makes their ecological footprint small based on the reading text. Mark an action that makes your ecological footprint small together with students to familiarize them with the format of the exercise.
4	Give students enough time to draw their ecological footprint, complete the sentences based on their drawings and present it to their classmates.
	Listening Small Ecological Footprint
5	Listening Small Ecological Footprint Watch the video and discuss with students if they have a big or small ecological footprint.
5	•
5	Watch the video and discuss with students if they have a big or small ecological footprint.
_	Watch the video and discuss with students if they have a big or small ecological footprint. Visit ace.aua.am/ourplanet to access the video. Give students enough time to match the pictures with the words in the box based on the video. Match two words with the right pictures together with students to familiarize them
_	Watch the video and discuss with students if they have a big or small ecological footprint. Visit ace.aua.am/ourplanet to access the video. Give students enough time to match the pictures with the words in the box based on the video. Match two words with the right pictures together with students to familiarize them with the format of the exercise.

Speaking | Reducing Ecological Footprint

Ask students to make small groups. Give students enough time to write ideas how to reduce their ecological footprint by filling in the chart and present it to the class or other groups. Give an example of how people can reduce their ecological footprint together with students to familiarize them with the format of the exercise.

Writing | Reducing My Ecological Footprint with My Family

Give students enough time to answer the questions by finishing the sentences and then share their answers with their classmates. Write an example together with students to familiarize them with the format of the exercise.

Word Wall

At the end of the class give each student enough time to write 1-2 words on the poster.

Project | Saving Water

- Ask students to save water before the next class. Discuss with them *how* they can save water in their homes.
- Ask students to calculate and write how many liters of water they and their families saved in the box. To do the calculations:
 - Ask students to read their water meters, keep the meter reading and use water the way they usually use it for the next 2-3 days. Ask them to read their water meters again in 2-3 days and calculate how much water they consumed by converting consumptions to liters and subtracting the first water meter reading result from the second one.
 - To know how much water students can save, ask them to read their water meters again, keep the meter reading and start saving water for the next 2-3 days by taking short showers, turning off the water tap while brushing teeth and washing dishes. Ask students to encourage all their family members to save water for the next 2-3 days to get more accurate results. Ask them to read their water meters again in 2-3 days and calculate how much water they saved by converting consumptions to liters

and (1) subtracting the second water meter reading result from the first one, (2) subtracting the results of the last 2-3 days from the results of the first 2-3 days.

- Draw the chart on the board. Ask students to take turns and fill out their calculations. After having the results, calculate how many liters of water the class has saved by adding the numbers in each column.
- Give students enough time to think about the questions. Then discuss the questions as a class.

Vocabulary | Words Describing Reduce, Reuse, Recycle > **Slide 44:** Ask students to repeat the words for the pictures in the slide after you. 1 After students can say the words confidently, remove the words and ask students to name the pictures. ➤ **Slides 45-49:** Ask students to make small groups and stand in a circle. Give students 2 enough time to take turns to stand in the circles and match a verb with the right noun by looking at the slides. **Listening | Reducing, Reusing, Recycling** > **Slide 50:** When reading the text for each slide, stress the key words illustrated in 3 the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation. > Slide 51: Give students enough time to make small groups and brainstorm how people can reduce, reuse and recycle different things. After students finish, discuss the examples as a class. Reading | Reducing, Reusing, Recycling Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words. Give students enough time to answer the True/False questions based on the reading text. 5 Answer the first question together with students to familiarize them with the format of the exercise. **Grammar | Past Simple with Regular Verbs**

Give students enough time to fill out the sentences with the past simple of the verbs in the box and write True or False next to each sentence based on the pictures. Fill out the first

sentence together with students to familiarize them with the format of the exercise.

7	Give students enough time to describe Mary`s last week. Complete the first sentence
	together with students to familiarize them with the format of the exercise.

Speaking | Giving Solutions

Ask students to make small groups. Give students enough time to think and describe their ecological footprint and suggest ideas to reduce, reuse, and recycle the things they use a lot by filling in the chart. Then ask students to share their answers with the class or other groups. Fill in the first sentences of the chart together with students to familiarize them with the format of the exercise.

Writing | Reflecting on the Past Week

Give students enough time to write some good things they did for the environment past week using the correct forms of the verbs in the box. Write a sentence together with students to familiarize them with the format of the exercise.

Word Wall

At the end of the class give each student enough time to write 1-2 words on the poster.

Project | Collecting Paper for Recycling

- Discuss the importance of recycling paper with students. Ask students not to throw used paper away. Encourage them to collect paper and take it to recycling centers for making new things such as milk cartons, toilet rolls, egg boxes etc.
- To recycle paper:
 - ask students to collect used paper from their neighbors, family, and school
 - find a recycling company
 - ask the recycling specialists of the company to show and explain the process of recycling paper to students if possible
 - calculate how many trees, how much water and electricity students saved
 - after paper is recycled, take some samples and show it to students

Let's Review

- To carry out the activity, you will need to have:
 - a small bag of beans
 - copies of the cards
 - ➤ **Slides 52-54:** Ask students to make small groups. Distribute the cards and give a few beans to each group. Show the pictures in the slides one by one and ask students to name it and then find the word on their cards. Ask them to put a bean on the word if they have it on their cards. (See the Printouts section)
- Give students enough time to answer the questions. Answer the first question together with students to familiarize them with the format of the exercise.

Printouts

LET`S REVIEW Bingo Cards



Coal	Air	waste	sunlight	pollute water
cut trees	natural resources	gas	water	electricity
ecological footprint	kill animals	shovel	pond	ride a bike
oil	zebra	clothes	hole	eat
reduce	copybook	recycle	river	animals
gloves	plants	reuse	pond	waste

Answer Key for Unit 2.1

	Reading Renewable and Non-renewable Natural Resources
4	1. True
	2. True
	3. False
	4. False
	5. True
	6. False
5	1. a, b
	2. a, c
	3. b, c
	4. b, d
	Writing Naming Renewable and Non-renewable Resources
6	Renewable resources: plants, animals, oxygen, sunlight, water
	Non-renewable resources: coal
	Speaking Finding Renewable and Non-renewable Resources
7	1. Water biome
	1. plants, water
	2. water/a plant
	3. X
	5. A
	2. Water biome full of oil
	1. water, oil
	2. water
	3. oil

3. Forest biome

1. trees and other plants

- 2. a plant
- 3. X
- 4. Forest biome full of coal
- 1. trees and other plants, coal
- 2. a plant
- 3. coal

Grammar | Present Simple: affirmative and negative

- 8
- 1. clean
- 2. live
- 3. come
- 4. do
- 5. wear
- 6. save
- 9
- 1. do not/don't pollute
- 2. do not/don't kill
- 3. do not/don't cut down
- 4. does not/doesn't destroy
- 5. do not/don't use
- 6. do not/don't take

Vocabulary | Words Describing Overuse of Natural Resources

- 1
- 1. save water, save animals, save plants, save trees, save natural resources
- 2. destroy plants, destroy trees
- 3. overuse water, overuse natural resources
- 4. use water, use natural recourses, use plants, use trees

Reading | Importance of Natural Resources

- 4
- 1. I can take short showers to save water.
- 2. I can turn off the water tap while brushing my teeth to save water.
- 3. I can wash only full loads in a washing machine to save water.
- 4. I should not pollute water to save animals.
- 5. I should not cut down trees to save plants.
- 6. I should not destroy plants to save them.

Grammar | If

- 7
- 1. If
- 2. If
- 3. If
- 4. If
- 5. If
- 6. If

Writing | Saving Natural Resources

8

Renewable resources: water, trees, animals

Non-renewable resources: gas, coal, oil

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

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

Trees are renewable resources. If people cut down a lot of trees, there is little clean air.

Animals are renewable resources. If people kill a lot of animals, ecosystems can die.

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

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

Vocabulary | Words Describing Ecological Footprint 1. clothes 1 2. food 3. transportation 4. drinking water 5. waste Reading | Ecological Footprint saving water 3 buying less walking or riding a bike instead of using polluting forms of transportation **Listening | Small Ecological Footprint** 1.1. electricity, 1.2. water, 1.3. cars, 1.4. food 6 2.1. use public transportation, 2.2. use things again, 2.3. use less food, 2.4. ride a bicycle Grammar | How many/How much 1. much 7 2. much 3. many 4. much

5. much

1. True 5 2. True 3. True 4. True 5. True 6. True **Grammar | Past Simple with Regular Verbs** 1. polluted 6 2. planted 3. destroyed 4. turned off 5. reused 6. fixed 1. did not use \odot 7 2. did not create \odot 3. did not destroy 4. did not recycle 5. did not turn off Let's Review 1. Renewable: water, sunlight, animals 2 Non-renewable: coal, gas, oil 2. Water: turn off water tap while brushing teeth, take short showers Animals: do not kill animals, do not pollute water Plants: do not destroy plants, do not cut down trees

3. Food, clothes, transportation

Reading | Reducing, Reusing, Recycling

The Earth's Atmosphere

UNIT 3.1

Atmosphere

Ask students to make small groups. Give them enough time to brainstorm and write names of atmospheric gases in the ovals. After students finish, ask them to give examples of atmospheric gases. Discuss with students different gases in the atmosphere and which gas people and other animals can breathe in.

Vocabulary | Words Describing the Atmosphere

- Slide 57: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
- Give students enough time to match the pictures with the words in the box. Match the first word together with students to familiarize them with the format of the exercise.

Listening | The Earth's Atmosphere

- Slide 58: When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
 - > Slide 59: Give students enough time to think and answer the questions in the slide.

Reading | The Earth's Atmosphere

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Give students enough time to answer the True/False questions based on the reading text.

 Answer the first question together with students to familiarize them with the format of the exercise.



Give students enough time to put the words in the right order to make questions. Make the first question together with students to familiarize them with the format of the exercise.

Speaking | Asking and Answering about Solutions

Ask students to pair up and give a set of cards to each pair. Give students enough time to take turns to ask and answer the questions. Ask and answer a question together with students to familiarize them with the format of the exercise. (See the Printouts section)

Writing | Solving a Crossword Puzzle

Ask students to make small groups. Give them enough time to solve the crossword puzzle. Write a word in the crosswords puzzle together with students to familiarize them with the format of the exercise.

Word Wall

Vocabulary | Words Describing Air Pollution

- Slide 61: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
- Ask students to make small groups. Give them enough time to play the game.

Grammar | More/Less

Give students enough time to read the sentences and fill in the gaps with *more* or *less*. Fill in the first gap together with students to familiarize them with the format of the exercise.

Reading | Air Pollution

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Give students enough time to answer the True/False questions based on the reading text.

 Answer the first question together with students to familiarize them with the format of the exercise.

Speaking | Avoiding Air Pollution

Ask students to make small groups. Give them enough time to choose 1-2 problems, suggest solutions to those problems by filling in the chart and present them to the class or other groups. Choose a problem and give solutions to it together with students to familiarize them with the format of the exercise.



Watch the video and discuss with students how people pollute the air, what problems air pollution can cause and what people can do to reduce air pollution.

Visit ace.aua.am/ourplanet to access the video.

Give students enough time to match the pictures with the words in the box based on the video. Match the three words with the right pictures together with students to familiarize them with the format of the exercise.

Writing | Reflecting on the Past Week

Give students enough time to write some good things they did for the environment past week using the correct forms of the verbs in the box. Write a sentence together with students to familiarize them with the format of the exercise.

Word Wall

Vocabulary | Words Describing the Greenhouse Effect

- 1
- ➤ **Slide 63:** Ask students to repeat the words for the pictures in the slide after you. After students can say the words confidently, remove the words and ask students to name the pictures.
- > **Slides 64-66:** Ask students to watch the slides and name the pictures.

Listening | The Greenhouse Effect

- 2
- ➤ **Slides 67-68:** When reading the text for each slide, stress the key words illustrated in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation.
- ➤ **Slides 69-71:** Give students enough time to think and answer the questions in the slides.

Reading | The Greenhouse Effect

- Read the text together with students as a class. Read the text passage by passage to explain difficult concepts and unknown words.
- Ask students to make small groups. Give them enough time to fill in the chart with the right answers. Fill in a right answer together with students to familiarize them with the format of the exercise.

Grammar | When

Give students enough time to make one sentence out of two using *when*. Make the first sentence together with students to familiarize them with the format of the exercise.

Writing | Reducing Greenhouse Gases

Give students enough time to write down ideas how to reduce greenhouse gases and present the solutions to their classmates. Give an example to students to familiarize them with the format of the exercise.

Speaking | Describing the Greenhouse Effect

- Slide 72: Ask students to fill in the gaps with the right answers after you give them more information about greenhouse gases:
- Ask students to make small groups. Give them enough time to think and draw two pictures how people heat the atmosphere, describe each drawing with one sentence and present them to the class or other groups. Draw one picture on the board and describe it with one sentence for students to familiarize them with the format of the activity.
- Draw the chart on the board and divide students into two groups. Assign one group as "X" and the other group as "O" and give a piece of colorful paper to each group. Ask them the following questions:
 - Name the five biomes. (forest, desert, tundra, water biome, grassland)
 - Name three ways people make the greenhouse effect strong. (burn coal, cut down trees, use polluting forms of transportation)
 - Name three ways to reduce greenhouse gases. (plant trees, reduce smoke from factories, use less polluting forms of transportation)

The group, that is the first to raise the colorful paper and give the right answer, can fill in the chart. The group that completes a whole row, wins.

Word Wall

Project | Catching Air Pollution

- Prepare all the materials: petroleum jelly, a piece of cardboard and a piece of yarn for each student.
- Give a piece of yarn and a piece of cardboard to each student. Have petroleum jelly ready to use. Follow the steps and make air pollution catchers with students.
- Ask students to hang the pollution catchers somewhere in their house or garden for a week to catch pollutants. When students bring the experiment results to class, give them enough time to share the results with their classmates and discuss how much the air is polluted. Discuss the reasons of air pollution as a class: burning wood, cutting down trees, using polluting forms of transportation etc.

Select all four topics and explain:

Vocabulary | Words Describing Global Warming > **Slide 74:** Ask students to repeat the words for the pictures in the slide after you. 1 After students can say the words confidently, remove the words and ask students to name the pictures. Give students enough time to fill in the missing letters. Fill in the missing letters of the first 2 word together with students to familiarize them with the format of the exercise. **Listening | Global Warming** > **Slides 75-76:** When reading the text for each slide, stress the key words illustrated 3 in the pictures. Ask students to repeat the words when they are new to them. Point at the pictures in the slides when naming them and speak slowly and with clear enunciation. > Slides 77-78: Ask student to look at the pictures in the slides and answer the questions. Reading | Global Warming Read the text together with students as a class. Read the text passage by passage to explain 4 difficult concepts and unknown words. Give students enough time to find the right answers. Choose the right answer to the first 5 question together with students to familiarize them with the format of the exercise. **Speaking | Solutions to Global Warming** Use the series of visualizations to explain to students how some of the climate indicators 6 are changing. To access it, visit bit.ly/climate-time-machine.

- Sea Ice: it shows how much snow has melted because of global warming in the Arctic sea.
- Sea Level: red color shows how much sea levels have risen.
- Carbon Dioxide: red and yellow colors show higher concentrations of carbon dioxide in the air.
- Global warming: red and yellow colors show how much warmer the Earth has become.

After watching it, discuss the questions with students in exercise 6.

Ask students to think and write down ways to reduce global warming individually and then compare their answers with a partner. Think of a way to reduce global warming together with students to familiarize them with the format of the exercise.

Grammar | Past Simple with Irregular Verbs

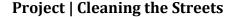
- Give students enough time to match the present forms with the past forms of the irregular verbs in the table. Match a verb together with students to familiarize them with the format of the exercise.
- Give students enough time to complete the sentences and then make them negative.

 Complete the first sentence together with students to familiarize them with the format of the exercise.

Writing | Reflecting on the Past Week

Give students enough time to write some good things they did for the environment past week using the correct forms of the verbs in the box. Write a sentence together with students to familiarize them with the format of the exercise.

Word Wall



- Slide 79: Ask students to repeat the words for the pictures in the slide after you.

 After students can say the words confidently, remove the words and ask students to name the pictures.
 - ➤ **Slides 80-82:** Ask students to watch the slides and name the pictures.
- To clean the streets, prepare all the materials beforehand: trash bags, brooms, dustpans, and gloves. Discuss how to get the materials with students.
- Follow the steps to carry out the clean-up project with students.

Let's Review

Ask students make six groups. Assign a topic to each group and give them enough time to carry out the activity. Fill in the information about the first topic together with students to familiarize them with the format of the activity.

Printouts

 $\ \, \textbf{UNIT 3.1} \ \textbf{Flashcards to ask and answer the questions} \\$



save water	save electricity	to not pollute water
to not pollute air	save natural resources	save gas
reduce waste	have small ecological footprint	save paper

Mind map

- 1. oxygen
- 2. carbon dioxide
- 3. nitrogen
- 4. argon
- 5. methane

Vocabulary | Words Describing the Atmosphere

- 2 1. atmosphere
 - 2. carbon dioxide
 - 3. gases
 - 4. oxygen
 - 5. climate

Reading | The Earth's Atmosphere

- 5 1. False
 - 2. True
 - 3. False
 - 4. True
 - 5. True

Grammar | "What" Questions in Present Simple

- 6 1. What do you do to save water?
 - 2. What do you do to save electricity?
 - 3. What do you do to not waste water?
 - 4. What do you do to recycle paper?
 - 5. What do you do to not waste electricity?

Writing | Solving a Crossword Puzzle

Across: 1. atmosphere, 5. recycle, 6. food, 7. reuse, 8. water *Down:* 2. oxygen, 3. gas, 4. carbon dioxide, 9. reduce

Grammar | More/Less

- 3
- 1. less
- 2. more

more

4. less

3.

- 5. less
- 6. more

Reading | Air Pollution

- 5
- 1. False
- 2. True
- 3. True
- 4. False
- 5. False
- 6. True

Listening | Bad Effects of Air Pollution

- 8
- 1.1. cutting trees, 1.2. burning coal, 1.3. burning wood
- 2.2. asthma, 2.2. cancer, 2.3. skin disease
- 3.1. use public transport, 3.2. reduce smoke from factories, 3.3. plant trees

Reading | The Greenhouse Effect

Greenhouse: 1. sun. 2. go out, 3. winters

Greenhouse gases: 1. carbon dioxide, 2. warm, 3. people cut down a lot of trees/use polluting forms of transportation/have a lot of factories/use a lot of electricity

Grammar | When

- 5 1. When
 - 2. When
 - 3. When
 - 4. When
 - 5. When

Speaking | Describing the Greenhouse Effect

- 1. carbon dioxide
 - ┛ 2. warm
 - 3. cold

Vocabulary | Words Describing Global Warming

- 2
- 1. drought
- 2. flood
- 3. wildfire
- 4. ice
- 5. sea
- 6. global warming

Reading | Global Warming

- 5
- 1. a
- 2. b
- 3. carbon dioxide
- 4. drought, wildfire, flood, threat to animals

Speaking | Solutions to Global Warming

- 6
- 1. Earth has become warmer place to live in.
- 2. There is too much carbon dioxide in the atmosphere.
- 3. A lot of carbon dioxide in the atmosphere is bad. It can cause a lot of problems.
- 4. Yes, there can be floods because of global warming.
- 5. Yes, a lot of ice can melt because of global warming.

Grammar | Past Simple with Irregular Verbs

- 8
- 1. g
- 2. h
- 3. a
- 4. b
- 5. c
- 6. d7. e
- 8. f

- 9
- 1. drank/ didn't drink
- 2. took/ didn't take
- 3. made/ didn't make
- 4. bought/ didn't buy
- 5. cut down/ didn't cut down
- 6. got/ didn't get
- 7. rode/didn't ride