

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
СХІДНОУКРАЇНСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ  
ІМЕНІ ВОЛОДИМИРА ДАЛЯ

МЕТОДИЧНІ ВКАЗІВКИ  
до практичних та самостійних занять з дисципліни  
«ІНОЗЕМНА МОВА (АНГЛІЙСЬКА)»  
*(для здобувачів вищої освіти напряму підготовки «Екологія»).*  
3-й рік навчання

ЗАТВЕРДЖЕНО  
на засіданні кафедри  
«Іноземних мов та  
професійної комунікації»  
Протокол № 11  
від 17.06. 2021.

Севєродонецьк 2021

Методичні матеріали до практичних та самостійних занять з дисципліни «Іноземна мова (англійська)» (для здобувачів вищої освіти напряму підготовки «Екологія»). 3-й рік навчання / Уклад.: Н.О. Барвіна. – Сєверодонецьк: вид-во СНУ ім. В.Даля, 2021. – 39 с.

Дані методичні матеріали містять тексти (з Інтернет-посиланням на прослуховування) та вправи на розвиток комунікативних навичок професійного спілкування для засвоєння курсу «Іноземна мова (англійська)» здобувачами вищої освіти спеціальності Екологія, які важливо засвоїти на третьому році навчання у вищій школі. Тексти, які базуються на сучасних дослідженнях в області Екології, а також дотекстові та післятекстові завдання сприяють формуванню знань та навичок читання (Reading), аудіювання (Listening), говоріння (Speaking) та письма (Writing), що є необхідним для комплексного оволодіння іноземною мовою.

Укладач:

Н. О. Барвіна, ст. викладач

Рецензент:

Н. О. Давіденко, ст. викладач

## ЗМІСТ

Вступ	4
TEXT A. Two-fifths of world's plants at risk of extinction	5
TEXT B. Most of world's rivers damaged by humans	9
TEXT C. Balloons deadliest plastic for seabirds	13
TEXT D. Scientists make biodegradable plastic	17
TEXT E. Arctic Circle sees highest-ever temperatures	21
TEXT F. Ecocide could become an international crime	25
TEXT G. Half of world's beaches could disappear by 2100	30
TEXT H. China plans to reduce single-use plastics	34

Інтернет-посилання

## Вступ

Запропоновані методичні матеріали розроблені відповідно до Типової програми з іноземних мов для вищих навчальних закладів та з урахуванням положень національної програми «Освіта».

В основу методичних матеріалів закладено принцип невід'ємності вивчення іноземних мов під час професійної підготовки сучасного фахівця та формування його комунікативних компетенцій. На цьому базується спеціалізована комунікативна орієнтованість курсу іноземної мови.

Метою даних методичних матеріалів є розвиток у студентів комунікативної компетенції, необхідної для здійснення спілкування англійською мовою з закордонними партнерами та розвиток навичок слухання, читання, говоріння та письма (Listening, Reading, Speaking, Writing), що на сьогодні є першочерговою задачею навчання іноземній мові.

Методичні матеріали для студентів 3 курсу містять базові тексти, з дотекстовими (Pre-text) та післятекстовими (Text-based) вправами та завданнями для розвитку навичок ведення дискусії (Discussion) під час професійного спілкування, а також граматичними завданнями.

Тематика даних методичних матеріалів розкриває сучасні тенденції в галузі екології та охорони середовища. Дані методичні матеріали можуть бути використані як під час проведення аудиторних занять, так і для самостійної роботи студентів. Важливим є те, що всі тексти, які розглядаються у методичних матеріалах, містять інформацію щодо сучасних досліджень і мають аутентичне аудіо-супроводження. Завдання, що надані в методичних матеріалах, були протестовані на практиці під час проведення практичних занять.

Отже, ефективність практичного використання даних методичних матеріалів для формування комунікативних навичок професійного спілкування є доведеною.

## TEXT A

### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

Scientists/plants/extinction /warning / research / urgent / action/ pandemic/positive /sign/plant /poverty /importance /fungi /opportunity /humankind/loss.

Have a chat about the topics you liked.

**2. Grow:**

Students A strongly believe we should all grow plants;

Students B strongly believe that is unnecessary.

**3. Risk:** Spend one minute writing down all of the different words you associate with the word "risk". Share your words with your partner(s) and talk about them.

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |            |  |
|------------|--|
| 1.revealed | a. An expert in or student of the scientific study of plants.          |
| 2.stark    | b. Becoming more apparent, important, or prominent.                    |
| 3.flora    | c. Made some previously unknown or secret information known to others. |
| 4.botanist | d. The plants of a particular region, habitat, or geological period.   |
| 5.urgent   | e. Unpleasantly or sharply clear.                                      |
| 6.clue     | f. Of a situation requiring immediate action or attention.             |
| 7.emerging | g. A fact or idea that serves as a guide or aid in a task or problem.  |

#### Paragraph 2

- |               |  |
|---------------|--|
| 8. species    | h. A thing on which someone or something depends or which provides a means of escape from a difficult situation. |
| 9. lifeline   | i. The state of being extremely poor.  |
| 10 poverty    | j. Thinking about and beginning to deal with an issue or problem.  |
| 11.insecurity | k. A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.   |
| 12 summit     | l. Demand forcefully to have something.  |
| 13 addressing | m. A meeting between heads of government.  |
| 14 insist     | n. The state of being open to danger or threat; lack of protection.  |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text A check your answers:**

1. The warning about plant extinction comes from a piece of research.
2. More than 42 scientists looked at the state of play regarding flora.
3. A botanist warned that we are living in an age of extinction.
4. The botanist said some new species could help fight pandemics.
5. The article says 4,000 new plant species were found in the past decade.
6. New plant species could be invaluable for the poor and hungry.
7. A botanist said we could survive without fungi.
8. Scientists said world leaders would not act to curb biodiversity loss.

**Listen to/read the text A and do the text-based exercises:**

### **Two-fifths of world's plants at risk of extinction**

Scientists have revealed that around two-fifths of the world's plants are at risk of extinction. This stark warning comes from a piece of research called the State of the World's Plants and Fungi. More than 200 scientists has recently analyzed the state of play of the world's flora in 42 countries. A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. It's a very worrying picture of risk and urgent need for action. We're losing the race against time because species are disappearing faster than we can find and name them. Many of them could hold important clues for solving some of the most pressing challenges of medicine and even perhaps of the emerging and current pandemics we are seeing today."

There have been positive signs in the past few years. More than 4,000 species of plants and fungi were discovered in 2019. Among these are potential future foods that could be a lifeline to millions of people on Earth suffering from poverty and food insecurity. Professor Antonelli stressed the importance of protecting these and all plant life on Earth. He said: "We would not be able to survive without plants and fungi – all life depends on them. Every time we lose a species, we lose an opportunity for humankind." The research was released on the day of a United Nations summit aimed at addressing this issue. Leading scientists will meet and insist world leaders act against biodiversity loss.

### **Text-based exercises**

**1. Synonym match: Match the following synonyms from the article:**

- |               |                 |
|---------------|-----------------|
| 1. Revealed   | a. signs        |
| 2. Extinction | b. pressing     |
| 3. Top        | c. demand       |
| 4. Urgent     | d. dying out    |
| 5. Clues      | e. favorable    |
| 6. Positive   | f. remain alive |
| 7. Poverty    | g. type         |
| 8. Survive    | h. disclosed    |
| 9. Species    | i. destitution  |
| 10. Insist    | j. leading      |

**2. Phrase match: (Sometimes more than one choice is possible.)**

- |                                      |                          |
|--------------------------------------|--------------------------|
| 1. Stark                             | a. to millions of people |
| 2. We are living in an age           | b. pandemics             |
| 3. We're losing the race             | c. addressing this issue |
| 4. some of the most pressing         | d. warning               |
| 5. the emerging and current          | e. the past few years    |
| 6. There have been positive signs in | f. challenges            |
| 7. a life line                       | g. on them               |
| 8. suffering from                    | h. against time          |
| 9. all life depends                  | i. poverty               |
| 10. a United Nations summit aimed at | j. of extinction         |

**3. Put the words in the right order to make sentences:**

- from research . of piece a This warning stark
- play of the state flora . Analysed world of
- We are an extinction . age living of in
- could of them important Many hold clues .
- challenges medicine . most Some the pressing of of
- in signs Few years . the past positive few
- people to on millions of A lifeline Earth .
- importance the stressed protecting of these . Antonelli
- would to be able survive . We not
- biodiversity loss . world against act Insist leaders

**Discussion**

**1. Answer the questions:**

- Who said two-fifths of the world plants are at risk of extinction?
- How did the article describe the warning as being?
- How many scientists examined plant life around the world?
- In what field is Alexandre Antonelli an expert?
- What emerging things did a professor say new species could help?
- How many new species of plants and fungi were discovered in 2019?
- Who could new plant species be a lifeline for?
- What did a professor say we could not survive without?
- Who loses and opportunity if a plant species dies?
- What kind of loss do scientists want world leaders to act against?

**2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

<p><b>Role A – Cactus</b></p> <p>You think a cactus is the most important plant. Tell the others three reasons why. Tell them why their plant is not as important. Also, tell the others which is the least important of these (and why): bamboo, garlic or a cocoa plant.</p>
<p><b>Role B – Bamboo</b></p> <p>You think bamboo is the most important plant. Tell the others three reasons why. Tell them why their plant is not as important. Also, tell the others which is the least important of these (and why): a cactus, garlic or a cocoa plant.</p>
<p><b>Role C – Garlic</b></p> <p>You think garlic is the most important plant. Tell the others three reasons why. Tell them</p>

why their plant is not as important. Also, tell the others which is the least important of these (and why): bamboo, a cactus or a cocoa plant.

### **Role D – Cocoa Plant**

You think a cocoa plant is the most important plant. Tell the others three reasons why. Tell them why their plant is not as important. Also, tell the others which is the least important of these (and why): bamboo, garlic or a cactus.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

#### **Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'plant'?
3. What do you know about plants?
4. What are your favourite plants?
5. How important are plants?
6. How important are plants in your life?
7. Do we need to study more about plants at school?
8. What will happen as more and more plants become extinct?
9. What do you think of warnings like this?
10. How worried are you by this news?

#### **Student B's questions**

1. Did you like reading this article? Why/whynot?
2. What do you think of when you hear the word 'extinction'?
3. What do you think about what you read?
4. What do you think of plants?
5. How useful are fungi?
6. Should we spend more money on genetically modifying plants?
7. How serious an issue is food insecurity?
8. How do you feel when we lose a species of plant?
9. What do you think world leaders will do about this problem?
10. What questions would you like to ask the researchers?

#### **Grammar**

**1. Revise the topic Reported Speech.** Change the sentences from the text A with the direct speech into the reported ones.

*Example:* A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Passive Voice.** In the text A Find the sentences with the verbs used in the Passive Voice and transform them into the Active one.

**3. Revise the topic Present Perfect-Past Simple.** In the text A find the sentences with the verbs in these tenses and explain their use.



## TEXT B

### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

Study / rivers / human activity / data / polar regions / deserts / biodiversity / climate / regions / towns / cities / development / industrialization / population /

Have a chat about the topics you liked. Change topics and partners.

**2. Responsibility:**

Students A believe it is the responsibility of people who live next to a river to look after it;

Students B believe otherwise. Change partners again and share your ideas.

**3. Pollution:** How harmful are these kinds of pollution? How can we deal with them? Complete this table with your partner(s). Change partners and share your ideas.

	How Harmful?	How to Deal with It
River pollution		
Ocean pollution		
Air pollution		
Noise pollution		
Light pollution		
Space pollution		

4. Human activity: Rank these with your partner. Put the things we should protect from human activity at the top. Change partners often and share your rankings.

Space/Antarctica/Amazon River/Ancient sites/Deserts/Oceans/Rainforests

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |                |  |
|----------------|--|
| 1.study        | a. The variety of life in the world or in a particular habitat or ecosystem. |
| 2.conducted    | b. Organized and carried out.  |
| 3.examined     | c. Facts and statistics.   |
| 4.data         | d. A detailed checking and look of a subject or situation.                   |
| 5.polar        | e. Dirty, harmful or poisonous things in the air, rivers, countryside, etc.  |
| 6.biodiversity | f. Looked at in detail.  |
| 7.pollution    | g. About the North or South Pole.  |

#### Paragraph 2

- |                |   |
|----------------|---|
| 8. region      | h. Had a strong effect on someone or something.   |
| 9. lead        | i. The process of growing and getting more advanced.                                    |
| 10 development | j. The development of factories in a country or region on a wide scale.                 |
| 11. impacted   | k. An area or part of a country or the world having easy-to-understand characteristics. |

- |                      |   |
|----------------------|---|
| 12 due               | l. Main; top; most important.   |
| 13 industrialisation | m. Looked at the things that are the same and things that are different between different things. |
| 14 compared          | n. Because of.  |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text B check your answers:**

1. Humans have damaged over 85% of the world's rivers.
2. Researchers looked at data on more than 2,500 rivers.
3. Scientists looked at biodiversity loss over the past 2,000 years.
4. Farming is one reason for the damage done to rivers.
5. The worst-hit rivers are those in South America.
6. The River Thames in London is now very clean.
7. The rivers with the least damage are in Africa and Australia.
8. Rivers today look very different to how they looked 200 years ago.

**Listen to/read the text B and do the text-based exercises:**

### **Most of world's rivers damaged by humans**

A new study has recently shown that 86 per cent of the world's rivers had been damaged by human activity. The study was conducted by researchers from a university in Toulouse, France. They examined data on over 2,500 rivers around the world. They did not look at rivers in the polar regions of the Arctic and Antarctica or in deserts. The scientists looked into changes to biodiversity over the past 200 years. They discovered that biodiversity in over half of rivers had been seriously damaged by humans. The researchers said there were many reasons for this damage. A big reason is the introduction of new species of fish into rivers. Other reasons include pollution, dams, overfishing, farming and climate change.

The researchers said the worst-hit rivers were in western Europe and North America. This is because these regions have large and rich towns and cities. The lead researcher said: "Rivers which have the most economic development around them, like the Mississippi River, are the most strongly impacted." The River Thames in London was one of the worst-affected rivers in the study. The least-impacted rivers are in Africa and Australia. The researcher said: "This is probably due to a slower rate of industrialization in Africa and low population density around rivers in Australia." He added that rivers in many rich nations were unrecognizable compared with how they were 200 years ago.

### **Text-based exercises**

**1. Synonym match: Match the following synonyms from the article.**

- |               |                   |
|---------------|-------------------|
| 1. Conducted  | a. wealthy        |
| 2. Regions    | b. found          |
| 3. Discovered | c. unidentifiable |
| 4. Reason     | d. areas          |
| 5. Rich       | e. affected       |
| 6. Impacted   | f. harmed         |

- |                   |                |
|-------------------|----------------|
| 7. due to         | g. cause       |
| 8. rate           | h. speed       |
| 9. unrecognizable | i. carried out |
| 10. damaged       | j. because of  |

**2. Phrase match: (Sometimes more than one choice is possible.)**

- |                                       |                         |
|---------------------------------------|-------------------------|
| 1. 86 per cent of the world's rivers  | a. development          |
| 2. They examined data on              | b. the Arctic           |
| 3. the polar regions of               | c. and rich towns       |
| 4. The scientists looked into changes | d. of fish              |
| 5. the introduction of new species    | e. 200 years ago        |
| 6. the worst-hit rivers are           | f. have been damaged    |
| 7. these regions have large           | g. to biodiversity      |
| 8. economic                           | h. of industrialization |
| 9. due to a slower rate               | i. over 2,500 rivers    |
| 10. compared with how they were       | j. in western Europe    |

**3. Put the words in the right order to make sentences:**

1. been have Rivers by damaged activity . human
2. of region the polar in the Rivers Arctic .
3. past the biodiversity 200 to over years . Changes
4. there reasons . The said were many researchers
5. into introduction species The rivers . fish of of
6. have these regions is towns . large because This
7. economic have which the development . most Rivers
8. the was Thames The one worst-affected . River of
9. is This probably due to rate . a slower
10. nations Rivers are many unrecognizable . in rich

**Discussion**

**1. Answer the questions:**

1. What percentage of the world's rivers have been damaged by humans?
2. How many rivers did researchers look at?
3. Where were rivers scientists did not look at besides the polar regions?
4. What have humans seriously damaged in over half of rivers?
5. What was introduced into rivers that caused damage to biodiversity?
6. Where are the worst-hit areas besides North America?
7. What kind of development strongly impacts rivers?
8. What does the article say is one of the worst-affected rivers?
9. What is low around rivers in Australia?
10. What are today's rivers very different from?

**2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

**Role A – Space**

You think space is the thing we most need to protect from human activity. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others

which of these is the least in need of protection (and why): Antarctica, oceans or rainforests.

**Role B – Antarctica**

You think Antarctica is the thing we most need to protect from human activity. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which of these is the least in need of protection (and why): space, oceans or rainforests.

**Role C – Oceans**

You think oceans are the things we most need to protect from human activity. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which of these is the least in need of protection (and why): Antarctica, space or rainforests.

**Role D – Rainforests**

You think rainforests are the things we most need to protect from human activity. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which of these is the least in need of protection (and why): Antarctica, oceans or space.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

**Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'river'?
3. What do you think of rivers?
4. What is your favourite river?
5. What childhood memories do you have of rivers?
6. How do humans damage rivers?
7. What do you think of your country's rivers?
8. What rivers around the world would you like to see?
9. What do you know about biodiversity loss?
10. How do you feel when you see polluted rivers?

**Student B's questions**

1. Did you like reading this article? Why/not?
2. What do you think of when you hear the word 'human'?
3. What do you think about what you read?
4. What do you think of rivers in cities?
5. What responsibility do city people have for their rivers?
6. What should polluting companies do to clean up rivers?
7. What activities do you like doing in rivers?
8. What damage is done when a river dies?
9. How might rivers have looked 200 years ago?
10. What questions would you like to ask the researchers?

**Grammar**

**1. Revise the topic Reported Speech.** Change the sentences from the text B with the direct speech into the reported ones.

*Example:* A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Sequence of Tenses.** In the text B find the complex sentences in which the rules of Sequences are followed and analyze them.

**3. Revise the topic Present Perfect-Past Simple.** In the text B find the sentences with the verbs in these tenses and explain their use.

## TEXT C

### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

scientists / alarming / discovery / plastic / seabirds / responsible / researcher / fatal / threat/mortalities/marine/debris/species/squid

Have a chat about the topics you liked. Change topics and partners.

**2. Ban:**

Students A believe governments must ban balloons;

Students B believe they shouldn't.

Change partners again and talk about your conversations.

**3. Pollution:** How bad are these kinds of pollution? How can we reduce them? Complete this table with your partner(s). Change partners and share what you wrote.

	How Bad?	Solutions
Plastic		
Noise		
Air		
River		
Nuclear		
Litter		

**4. Plastics:** Rank these with your partner. Put the worst at the top. Change partners often and share your rankings.

food trays/carrier bags/food packaging/toys/balloons/bottles/glitter/pens

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |   |   |
|---|---|
| <p>1. alarming</p> <p>2. institute</p> <p>3. accounted for</p> <p>4. ingested</p> <p>5. fragments</p> | <p>a. A society or organization having a particular object or common factor, especially a scientific, educational, or social one.</p> <p>b. Took food, drink, or another substance into the body by swallowing or absorbing it.</p> <p>c. The action of blocking something or the state of being blocked.</p> <p>d. Supplied or made up a specified amount or proportion.</p> <p>e. The stomach or belly.</p> |
|---|---|

- |                  |  |
|------------------|--|
| 6. gut           | f. Worrying or disturbing.   |
| 7. obstructions  | g. Small parts broken or separated off something.                              |
|                  | <b>Paragraph 2</b>   |
| 8. attributed to | h. A person or thing likely to cause damage or danger.                         |
| 9. threat        | i. The state or fact of existing, occurring, or being in a place or thing.     |
| 10 presence      | j. Look or seem like someone or something else.                                |
| 11.mortalities   | k. Buoyant or suspended in water or air.                                       |
| 12 floating      | l. Deaths.   |
| 13 swallow       | m. Regarded something as being caused by someone or something.                 |
| 14 resemble      | n. Cause or allow something, especially food or drink to pass down the throat. |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text C check your answers:**

1. Scientists started alarm clock bells ringing about a discovery.
2. Research was done on seabirds in the North Pole.
3. Balloons accounted for over 40% of plastic-related seabird deaths.
4. A researcher said hard plastics pass more slowly through the gut.
5. Around 25% of dead seabirds in the research died because of plastic.
6. A researcher said marine debris is becoming less of a threat to birds.
7. There are about 280,000 tons of debris floating on our oceans.
8. Seabirds could eat balloons because they think they look like squid.

**Listen to/read the text C and do the text-based exercises:**

### **Balloons deadliest plastic for seabirds**

Scientists have made an alarming discovery about what kinds of pollution are most harmful to seabirds. A study led by Australia's Institute for Marine and Antarctic Studies discovered that balloons were the deadliest kind of plastic for seabirds. The research team said balloons were 32 times more likely to kill seabirds than hard plastics. They found that while balloons and other soft plastics accounted for only 5 per cent of plastics ingested, they were responsible for more than 40 per cent of deaths among seabirds. Lead researcher Lauren Roman said: "Hard plastic fragments may pass quickly through the gut, but soft plastics are more likely to become compacted and cause fatal obstructions."

The study examined 1,733 dead seabirds and found that more than a quarter of the deaths were attributed to eating plastic. Ms Roman explained that plastic was becoming an increasing threat to seabirds. She said: "Marine debris ingestion is now a globally recognized threat....We suggest that reducing the presence of balloons and balloon fragments in the ocean would directly reduce seabird mortalities." LiveScience.com said: "With an estimated 280,000 tons of floating marine debris worldwide, about half of all seabird species are thought to ingest plastic on a daily basis. Birds are especially

likely to swallow dangerous balloons because they closely resemble squid, according to the study."

### Text-based exercises

#### 1. Synonym match: Match the following synonyms from the article.

- |                  |              |
|------------------|--------------|
| 1. Alarming      | a. probable  |
| 2. Harmful       | b. look like |
| 3. Likely        | c. consumed  |
| 4. Ingested      | d. growing   |
| 5. Fatal         | e. damaging  |
| 6. attributed to | f. deaths    |
| 7. increasing    | g. globally  |
| 8. mortalities   | h. worrying  |
| 9. worldwide     | i. pinned on |
| 10. resemble     | j. deadly    |

#### 2. Phrase match: (Sometimes more than one choice is possible.)

- |   |                                 |
|---|---------------------------------|
| 1. Scientists have made an alarming         | a. of deaths                    |
| 2. balloons were 32 times more              | b. closely resemble squid       |
| 3. responsible for more than 40 per cent    | c. obstructions                 |
| 4. fragments may pass quickly               | d. mortalities                  |
| 5. cause fatal                              | e. to seabirds                  |
| 6. a quarter of the deaths were             | f. discovery                    |
| 7. plastic is becoming an increasing threat | g. likely to kill               |
| 8. reduce seabird                           | h. debris                       |
| 9. 280,000 tons of floating marine          | i. through the gut              |
| 10. swallow dangerous balloons because they | j. attributed to eating plastic |

#### 3. Put the words in the right order to make sentences:

1. An of what alarming discovery pollution . about kinds
2. seabirds . were the plastic deadliest for Balloons
3. were Balloons likely more kill . to 32 times
4. pass may through fragments the quickly gut . Plastic
5. more become compacted . to are Soft plastics likely
6. globally a ingestion threat . debris recognized Marine is
7. estimated 280,000 An floating of debris . marine tons
8. basis . daily plastic ingest to Thought a on
9. to balloons . especially likely swallow dangerous Birds are
10. closely squid, the study . to resemble according They

### Discussion

#### 1. Answer the questions:

1. What adjective did the article use to describe the discovery?
2. Where is the institute that conducted this research?
3. How many times are balloons more likely to kill seabirds than hard plastic?
4. What percentage of ingested plastic is made up of balloons?
5. What do hard plastic fragments pass through quickly?
6. How many dead seabirds did the researchers examine?

7. What did a researcher say was a globally recognized threat?
8. How much marine debris is floating on Earth's oceans?
9. How many seabirds are estimated to ingest balloons on a daily basis?
10. What do seabirds think balloons look like?

**2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

**Role A – Balloons**

You think balloons are the worst pollutants. Tell the others three reasons why. Tell them why their things aren't as polluting. Also, tell the others which is the least damaging of these (and why): glitter, bottles or carrier bags.

**Role B – Glitter**

You think glitter are the worst pollutants. Tell the others three reasons why. Tell them why their things aren't as polluting. Also, tell the others which is the least damaging of these (and why): balloons, bottles or carrier bags.

**Role C – Bottles**

You think bottles are the worst pollutants. Tell the others three reasons why. Tell them why their things aren't as polluting. Also, tell the others which is the least damaging of these (and why): glitter, balloons or carrier bags.

**Role D – Carrier Bags**

You think carrier bags are the worst pollutants. Tell the others three reasons why. Tell them why their things aren't as polluting. Also, tell the others which is the least damaging of these (and why): glitter, bottles or balloons.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

**Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'balloon'?
3. What do you think of balloons?
4. Should governments ban all plastics?
5. How sad is the sight of a bird killed by a balloon?
6. What should governments now do about this problem?
7. What could you do to reduce the use of plastics?
8. How much plastic is there in our food chain?
9. Should balloons be banned?
10. Would you like to do research in Antarctica?

**Student B's questions**

1. Did you like reading this article? Why/why not?
2. What do you think of when you hear the word 'plastic'?
3. What do you think about what you read?
4. Why do we need balloons in this world?
5. How can we educate people about the danger of balloons?
6. How much of a threat are humans to birds?
7. What can be done to clean up marine debris?
8. What will you do from today to use less plastic?
9. How do you feel when you see a beach covered in plastic?



10. What questions would you like to ask the researchers?

### Grammar

**1. Revise the topic Reported Speech.** Change the sentences from the text C with the direct speech into the reported ones.

Example: A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Sequence of Tenses.** In the text C find the complex sentences in which the rules of Sequences are followed and analyze them.

**3. Revise the topic Active-Passive Voice.** In the text C find the sentences with the verbs in Passive and make them active following the rules.

### TEXT D

#### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

plastic / blight / landscape / environmentalist / alternatives / straw / organic / heat / polyester / enzymes / nutrients / molecules / single-use plastics / electronics

Have a chat about the topics you liked. Change topics and partners.

**2. Plastic tax:**

Students A believe there should be a heavy tax on plastic;

Students B believe the opposite.

Change partners again and talk about your conversations.

**3. Alternatives:** What could we use instead of plastic for these things? Would this be better? Complete this table with your partner(s). Change partners and share what you wrote.

	Alternative	Better?
Bags		
Straws		
Bottles		
Utensils		
Pens		
Furniture		

**4. Wasted stuff:** Rank these with your partner. Put the things we should never throw away at the top. Change partners often and share your rankings.

Clothing/Shoes/Cellphones/Computers/Books/Bicycles/Carpets/Newspapers

#### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

1. blight

2. decade

3. plea

4. alternative

5. utensils

a. A period of ten years.

b. One or more things available as another possibility.

c. Material that is not wanted.

d. A request made in an urgent and emotional manner.

e. Make or become rotten; decay or cause to decay.

- |                        |  |
|------------------------|--|
| 6. decompose           | f. A thing that spoils or damages something.   |
| 7. waste               | g. A thing, container, or other article, especially for household use.                           |
| <b>Paragraph 2</b>     |  |
| 8. polyester           | h. A substance produced by a living organisms which bring about a specific biochemical reaction. |
| 9. enzyme              | i. Leave something uncovered or unprotected, especially from the weather.                        |
| 10. exposed            | j. Things we use that have transistors or microchips in them.                                    |
| 11. nutrients          | k. The upper layer of earth in which plants grow.  |
| 12. soil               | l. Substances that provide nourishment essential for growth and life.                            |
| 13. on the right track | m. A synthetic resin used to make plastic.   |
| 14. electronics        | n. Going in the right direction or doing the right things to be successful.                      |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text D check your answers:**

1. The article says plastic is very bright in the landscape.
2. The article says scientists have several solutions for plastic.
3. The scientists said the plastic they created could be compostable.
4. The new biodegradable plastic could take weeks to decompose.
5. The new plastic contains enzyme-eating polyester.
6. The new plastic biodegrades into lactic acid and feeds the soil.
7. A professor said her team are on the left track.
8. A professor said we are taking things from Earth at a slower rate.

**Listen to/read the text D and do the text-based exercises:**

### **Scientists make biodegradable plastic**

Plastic has been a blight on the landscape and a deadly threat to wildlife for decades. Environmentalists have issued many pleas for us to reduce the amount of plastic we use or switch to biodegradable alternatives. One solution to this problem may be at hand. Scientists have developed a form of biodegradable plastic. This means that the billions of plastic bags, cups, straws and utensils that we dispose of each day could be "compostable" - they could decompose and break down as naturally as organic waste. The scientists are from the University of California, Berkeley. They say they have invented a plastic that could break down within a few weeks, rather than centuries, using just heat and water.

The new, biodegradable product involves embedding polyester-eating enzymes into the plastic during the production process. When these enzymes are exposed to heat and water, they eat away at the plastic and reduce it to lactic acid. This provides nutrients for the soil when composted. Professor Ting Xu said up to 98 per cent of the plastic her team made degraded into small molecules. She said: "We are basically saying that we are on the right track. We can solve this continuing problem of single-use

plastics." She added: "Look at all the wasted stuff we throw away - clothing, shoes, electronics like cellphones and computers. We are taking things from the earth at a faster rate than we can return them."

### Text-based exercises

#### 1. Synonym match: Match the following synonyms from the article.

- |               |               |
|---------------|---------------|
| 1. Blight     | a. figure out |
| 2. Pleas      | b. throw away |
| 3. Switch     | c. implanting |
| 4. dispose of | d. requests   |
| 5. break down | e. pace       |
| 6. embedding  | f. nuisance   |
| 7. exposed    | g. squandered |
| 8. solve      | h. decompose  |
| 9. wasted     | i. change     |
| 10. rate      | j. introduced |

#### 2. Phrase match: (Sometimes more than one choice is possible.)

- |   |                        |
|---|------------------------|
| 1. Plastic has been a blight                  | a. enzymes             |
| 2. a deadly threat to                         | b. waste               |
| 3. switch to biodegradable                    | c. trash               |
| 4. the billions of plastic bags, cups, straws | d. wildlife            |
| 5. break down as naturally as organic         | e. to heat and water   |
| 6. embedding polyester-eating                 | f. on the landscape    |
| 7. When these enzymes are exposed             | g. stuff we throw away |
| 8. This provides nutrients                    | h. and utensils        |
| 9. we are on the right                        | i. for the soil        |
| 10. all the wasted                            | j. alternatives        |

#### 3. Put the words in the right order to make sentences:

1. blight the has on been Plastic a landscape .
2. to deadly threat for A wildlife decades .
3. to use . amount of plastic the Pleas reduce
4. as down waste . Break organic as naturally
5. say invented They plastic . they have a
6. to exposed enzymes these When heat . are
7. for when composted . soil the nutrients provides This
8. track . on we're We're saying basically the right
9. earth . the are taking We from things
10. return faster than we A rate can them.

### Discussion

#### 1. Answer the questions:

1. What does the article say plastic has been a blight on?
2. What does the article say we could switch to?
3. What could the new plastic break down as naturally as?
4. Where are the scientists from?
5. How long might the plastic take to biodegrade?

6. What has been embedded in the new plastic?
7. What does the new plastic become after it decomposes?
8. How much of the teams plastic degraded into small molecules?
9. What kind of track did a professor say her team was on?
10. Where did a professor say we are taking things from?

**2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

**Role A – Clothing**

You think clothing is top of the list of things never to throw away. Tell the others three reasons why. Tell them why it is OK to throw their things away. Also, tell the others which of these is top of the list of things that can be disposed of (and why): computers, books or bicycles.

**Role B – Computers**

You think computers are top of the list of things never to throw away. Tell the others three reasons why. Tell them why it is OK to throw their things away. Also, tell the others which of these is top of the list of things that can be disposed of (and why): clothing, books or bicycles.

**Role C – Books**

You think books are top of the list of things never to throw away. Tell the others three reasons why. Tell them why it is OK to throw their things away. Also, tell the others which of these is top of the list of things that can be disposed of (and why): computers, clothing or bicycles.

**Role D – Bicycles**

You think bicycles are top of the list of things never to throw away. Tell the others three reasons why. Tell them why it is OK to throw their things away. Also, tell the others which of these is top of the list of things that can be disposed of (and why): computers, books or clothing.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

**Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'biodegradable'?
3. What do you think of plastic?
4. How do you feel when you see plastic waste in the countryside?
5. What damage is plastic doing to Earth?
6. How do you dispose of plastic?
7. How could you switch to alternatives to plastic?
8. What do you think of compostable plastic?
9. Do we need the plastic stuff around us right now to be made of plastic?
10. How good are you at recycling?

**Student B's questions**

1. Did you like reading this article? Why/not?
2. What do you think of when you hear the word 'plastic'?
3. What do you think about what you read?
4. How beneficial would biodegradable plastic be?

5. How is plastic made?
6. What do you think of single-use plastics?
7. How can we get all governments to focus on reducing plastic use?
8. What photos have you seen of plastic harming wildlife?
9. Should governments introduce a plastic tax?
10. What questions would you like to ask the scientists?

### Grammar

**1. Revise the topic Reported Speech.** Change the sentences from the text D with the direct speech into the reported ones.

Example: A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Sequence of Tenses.** In the text D find the complex sentences in which the rules of Sequences are followed and analyze them.

**3. Revise the topic Active-Passive Voice.** In the text D find the sentences with the verbs in Passive and make them active following the rules.

### TEXT E

#### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

meteorologist / global warming / temperatures / record / Earth / heat / normal / scientist / the Arctic / region / message / peril / alarming / levels / greenhouse

Have a chat about the topics you liked. Change topics and partners.

**2. Normal:**

Students A believe scientists can make global temperatures return to normal; Students B believe it's impossible. Change partners again and talk about your conversations.

**3. Extreme weather:** How bad are these extreme weather events? What can people do to stay safe? Complete this table with your partner(s). Change partners and share what you wrote.

	How Bad	How to Stay Safe
Boiling heat		
Freezing cold		
Snow blizzards		
Torrential rain		
Hurricanes		
Dust storm		

**4. Climate change:** Rank these with your partner. Put the best ways to curb climate change at the top. Change partners often and share your rankings.

LED lights/Electric cars/Vegetarian diet/Cycle more/Recycle more/Buy used clothes/Vote for green parties/Fly less.

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |                 |  |
|-----------------|--|
| 1.meteorologist | a. At the height of activity.  |
| 2.observed      | b. An expert in or student of weather patterns and the atmosphere.   |
| 3.indication    | c. A sign or piece of information that shows something.  |
| 4.in full swing | d. The area of variation between upper and lower limits on a particular scale.   |
| 5.mercury       | e. Things that warn of danger.   |
| 6.range         | f. Noticed or seen something and accept it as being significant.   |
| 7.alarm bells   | g. A heavy silvery-white metal which is liquid at ordinary temperatures and is used in thermometres. Its symbol is Hg.                                 |
|                 | <b>Paragraph 2</b>   |
| 8. concern      | h. Refuse to take notice of or acknowledge.  |
| 9. unsurprising | i. A colourless, odorless flammable gas which is the main part of natural gas and a big contributor to global warming. Its symbol is CH <sub>4</sub> . |
| 10 region       | j. Move faster.  |
| 11.ignore       | k. An area of a country or the world that has definable characteristics but not always fixed borders.  |
| 12 peril        | l. Risk or danger.   |
| 13 accelerate   | m. Anxiety or worry.   |
| 14 methane      | n. Not unexpected and so not causing surprise.   |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text E check your answers:**

1. Meteorologists said there has been a swing towards Arctic temperatures.
2. Temperatures in an Arctic town hit a record 38 degrees Fahrenheit.
3. A town in Siberia holds the world record for temperature fluctuations.
4. A town in Siberia rang alarm bells in the streets because it was so hot.
5. A professor said records are being broken around the world day by day.
6. The article said Antarctica is warming faster than anywhere in the world.
7. A professor wasn't surprised that records were being broken.
8. The article said alarming levels of methane are entering the atmosphere.

**Listen to/read the text E and do the text-based exercises:**

### **Arctic Circle sees highest-ever temperatures**

Meteorologists have observed another indication of global warming being in full swing. Temperatures in the Arctic Circle hit an all-time record on Saturday, with the mercury topping 38° Celsius in the Siberian town of Verkhoyansk. The town currently holds the Guinness World Record for the greatest temperature range on Earth. It

fluctuates from a low of minus 68°C to a high of 37.3°C. The record heat is 18 degrees higher than the daily average for June. The Arctic Circle has been experiencing a heatwave for much of this year. Temperatures have averaged 10 degrees above normal. This is ringing alarm bells with climatologists, who say the Arctic Circle is warming at twice the rate of the global average.

Atmosphere scientist Professor Dann Mitchell has expressed his concern on rising temperatures. He told the BBC: "Year-on-year temperature records are being broken around the world, but the Arctic is warming faster than anywhere else on Earth, so it is unsurprising to see records being broken in this region. We will see more of this in the near future." Professor Chris Rapley of University College London said: "This is a warning message from the Earth itself. We ignore it at our peril." Scientists say higher temperatures in Siberia could accelerate global warming. Melting Siberian permafrost is releasing alarming levels of the greenhouse gasses carbon dioxide and methane into the atmosphere.

### Text-based exercises

#### 1. Synonym match: Match the following synonyms from the article.

- |                 |               |
|-----------------|---------------|
| 1. Observed     | a. span       |
| 2. Topping      | b. risk       |
| 3. Range        | c. exceeding  |
| 4. Fluctuates   | d. undergoing |
| 5. Experiencing | e. area       |
| 6. Expressed    | f. noticed    |
| 7. Region       | g. disregard  |
| 8. Ignore       | h. worrying   |
| 9. Peril        | i. varies     |
| 10. Alarming    | j. conveyed   |

#### 2. Phrase match: (Sometimes more than one choice is possible.)

- |  |                              |
|--|------------------------------|
| 1. global warming being in full          | a. at our peril              |
| 2. Temperatures in the Arctic Circle hit | b. much of this year         |
| 3. It fluctuates from a                  | c. in the near future        |
| 4. experiencing a heatwave for           | d. are being broken          |
| 5. This is ringing alarm                 | e. low of minus 68°C         |
| 6. Year-on-year temperature records      | f. anywhere else on Earth    |
| 7. Warning faster than                   | g. swing                     |
| 8. We will see more of this              | h. bells with climatologists |
| 9. We ignore it                          | i. the greenhouse gases      |
| 10. releasing alarming levels of         | j. an all-time record        |

#### 3. Put the words in the right order to make sentences:

- global swing . warming full in Another of indication
- in Temperatures Arctic the an all-time record . hit
- for June . than Much higher daily average the
- with ringing is This climatologists . bells alarm
- average . of the rate global twice At the
- records are being around Temperature broken world . the

7. to It being is unsurprising broken . see records
8. a the from warning Earth itself . This is
9. global Siberia in accelerate could temperatures Higher warming .
- 10.greenhouse the Releasing of gasses . levels alarming

### **Discussion**

#### **1. Answer the questions:**

1. What did meteorologists saw was in full swing?
2. What was the record temperature in a town in Siberia last week?
3. What was the lowest temperature the article said the town recorded?
4. How much hotter than average are temperatures in Siberia?
5. What is ringing with climatologists?
6. What kind of scientist is Professor Dann Mitchell?
7. Where did the professor say was warming faster than anywhere else?
8. What was the professor not surprised to see being broken?
9. What did a professor say we do at out peril?
- 10.What is causing the production of alarming levels of greenhouse gasses?

#### **2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

##### **Role A – Use LED Lights**

You think using LED lights is the best way to curb climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): a vegetarian diet, buying used clothes or voting for green parties.

##### **Role B – Vegetarian Diet**

You think a vegetarian diet is the best way to curb climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): using LED lights, buying used clothes or voting for green parties.

##### **Role C – Buy Used Clothes**

You think buying used clothes is the best way to curb climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): a vegetarian diet, using LED lights or voting for green parties.

##### **Role D – Vote for Green Parties**

You think voting for green parties is the best way to curb climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): a vegetarian diet, buying used clothes or using LED lights.

#### **3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

##### **Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'Arctic'?
3. What do meteorologists do every day?
4. How do you feel about global warming?



5. What do you think of 38-degree temperatures?
6. Do you prefer freezing cold or boiling hot temperatures?
7. Has the weather in your country changed?
8. What do you do in heatwaves?
9. How worried are you about global warming?
10. How does your lifestyle add to global warming?

### Student B's questions

1. Did you like reading this article? Why/not?
2. What do you think of when you hear the word 'circle'?
3. What do you think about what you read?
4. What can you do to reduce your carbon footprint?
5. What is the danger of a warming Arctic Circle?
6. Do you think we will ignore the warning about global warming?
7. What is the danger of permafrost melting?
8. What warning message is the Earth telling us?
9. What do you know about methane?
10. What questions would you like to ask the meteorologists?

### Grammar

**1. Revise the topic Reported Speech.** Change the sentences from the text E with the direct speech into the reported ones.

Example: A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Present Perfect-Present Perfect Continuous.** In the text E find the sentences with the verbs in these tenses and analyze them.

**3. Revise the topic Comparatives/Superlatives.** In the text E find the sentences with the adjectives used in comparative and superlative degrees and analyze their use.

### TEXT F

#### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

law / international / statute / globe / destruction / ecosystem / at risk / sea levels / ecocide / power / criminal / corporations / corporate / Amazon / deforestation / oil  
Have a chat about the topics you liked. Change topics and partners frequently.

**2. Crime:**

Students A believe ecocide should be made a highly punishable crime;

Students B believe otherwise. Change partners again and talk about your conversations.

**3. International crimes:** How serious are these international crimes? How can we stop them? Complete this table with your partner(s). Change partners often and share what you wrote.

	How Serious?	How Can We Stop Them?
Ecocide		
Genocide		

War crimes		
Crimes against humanity		
Terrorism		
Cybercrime		

**4. Environmental damage:** Rank these with your partner. Put the best at the top. Change partners often and share your rankings.

Deforestation/Overfishing/Oil spills/Acid rain/Loss of biodiversity/Water pollution/Desertification/Climate change

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |               |   |
|---------------|---|
| 1.statute     | a. A written law passed by a legislative body.  |
| 2.drafting    | b. An act or strategy intended to resolve a difficulty or improve a situation; a fresh approach to something.   |
| 3.regulation  | c. Preparing a preliminary version of a text, report, law, etc.   |
| 4.destruction | d. About a law, rule, or obligation being able to be imposed so that it must be complied with.                  |
| 5.enforceable | e. A rule or directive made and maintained by an authority.   |
| 6.initiative  | f. The action or process of causing so much damage to something that it no longer exists or cannot be repaired. |
| 7.voiced      | g. Expressed an attitude or opinion.  |

#### Paragraph 2

- |                |   |
|----------------|---|
| 8. harness     | h. Relating to, done by, or affecting large numbers of people or things.  |
| 9. accountable | i. The full range of different levels of people or things, from the lowest to the highest.                      |
| 10 corporate   | j. Control and make use of natural resources, especially to produce energy.                                     |
| 11.scale       | k. An act of fishing in a boat with a very large net.   |
| 12 mass        | l. Of a person, organization, or institution required or expected to justify actions or decisions; responsible. |
| 13 trawling    | m. Instances of liquids (e.g. oil) coming out of something and going into a river, sea or other place.          |
| 14 spills      | n. Relating to a corporation, especially a large company or group.  |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text F check your answers:**

1. A new law on the environment has been passed into the statute books.
2. Lawyers want ecocide to be a crime like genocide.
3. The ecocide initiative is being led by a group of environmentalists.
4. Vanuatu and the Maldives backed the new ecocide law.

5. A professor said now was not the time to incorporate ecocide into law.
6. The professor wants to hold governments accountable for ecocide.
7. An ecocide foundation said most ecocide is caused by corporations.
8. The foundation highlighted oil spills and deep-sea trawling.

**Listen to/read the text F and do the text-based exercises:**

### **Ecocide could become an international crime**

There could be a new law on the international statute books. Lawyers across the globe are drafting regulations to make ecocide a crime. Ecocide is the destruction of the world's ecosystems. Lawyers want it to be a legally enforceable crime, much like crimes against humanity, war crimes and genocide. The initiative is being led by a professor from University College London (UCL) and a former judge at the International Criminal Court. It has attracted support from several European countries, notably France and Belgium. Island nations at risk from rising sea levels, such as Vanuatu and the Maldives, have voiced their support. A politician in the UK has called for ecocide to be incorporated into law.

Professor Philippe Sands of UCL spoke about why there is a need for ecocide to be made illegal. He said: "The time is right to harness the power of international criminal law to protect our global environment." He wants the law to hold governments and multi-national corporations accountable for the environmental damage they cause. The Stop Ecocide Foundation said: "In most cases ecocide is likely to be a corporate crime." It outlined the scale of destruction that would require an ecocide law being used. It said: "It would have to involve mass, systematic or widespread destruction. We are probably talking about Amazon deforestation on a huge scale, deep sea-bottom trawling or oil spills."

### **Text-based exercises**

**1. Synonym match: Match the following synonyms from the article.**

- |                |                |
|----------------|----------------|
| 1. Statute     | a. proposal    |
| 2. Globe       | b. won over    |
| 3. Initiative  | c. responsible |
| 4. Attracted   | d. law         |
| 5. Voiced      | e. devastation |
| 6. Harness     | f. extent      |
| 7. Accountable | g. expressed   |
| 8. Outlined    | h. exploit     |
| 9. Destruction | i. defined     |

**2. Phrase match: (Sometimes more than one choice is possible.)**

- |   |                      |
|---|----------------------|
| 1. There could be a new law on the international    | a. a huge scale      |
| 2. Lawyers across the globe are                     | b. enforceable crime |
| 3. Ecocide is the destruction of the                | c. accountable       |
| 4. Lawyers want to make it a legally                | d. world's ecosystem |
| 5. Island nations at risk from                      | e. the power         |
| 6. The time is right to harness                     | f. destruction       |
| 7. hold governments and multi-national corporations | g. statute books     |
| 8. In most cases ecocide is likely to be a          | h. rising sea level  |

9. mass, systematic or widespread
10. Amazon deforestation on

- i. corporate crime
- j. drafting regulations

**3. Put the words in the right order to make sentences:**

1. international A on law the new statute books .
2. across globe the Lawyers are drafting regulations .
3. want make to Lawyers it legally enforceable .
4. has attracted support from several It European countries .
5. for to Called incorporated be ecocide into law .
6. need to ecocide for be A made illegal .
7. law the He to wants governments hold accountable .
8. likely Ecocide be to is a corporate crime .
9. that would require Destruction ecocide an law .
10. probably We about talking are Amazon deforestation .

**Discussion**

**1. Answer the questions:**

1. What kind of books might the new law be on?
2. What does the article say lawyers are drafting?
3. Where did the judge behind the initiative used to work?
4. Which two island nations have backed the initiative?
5. Who called for ecocide to be incorporated into law?
6. What did a professor say was right to harness the power of criminal law?
7. Who does the professor want to hold accountable besides governments?
8. What kind of crime did a foundation say ecocide was most of the time?
9. What kind of destruction did the foundation say ecocide involved?
10. What did the foundation say would take place on a large scale?

**2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.**

**Role A – Deforestation**

You think deforestation is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, water pollution or biodiversity loss.

**Role B – Overfishing**

You think overfishing is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): deforestation, water pollution or biodiversity loss.

**Role C – Water Pollution**

You think water pollution is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, deforestation or biodiversity loss.

**Role D – Biodiversity Loss**

You think biodiversity loss is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, water pollution or deforestation.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

### **Student A's questions**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'crime'?
3. How worried are you about our planet's environment?
4. What do you think of ecocide becoming a crime?
5. Who are those most responsible for ecocide?
6. How does ecocide compare to crimes against humanity?
7. What environmental destruction most concerns you?
8. Should ecocide be made into law?
9. In what way has the environment in your country been destroyed?
10. Why isn't ecocide already a crime?

### **Student B's questions**

11. Did you like reading this article? Why/why not?
12. What do you think of when you hear the word 'ecosystem'?
13. What do you think about what you read?
14. How successful do you think an ecocide law would be?
15. What do you want to see done about environmental protection?
16. What punishments should countries receive for ecocide?
17. Should we boycott companies that are guilty of ecocide?
18. How damaging is deforestation?
19. What do you know about deep-sea trawling?
20. What questions would you like to ask the lawyers?

### **Grammar**

**1. Revise the topic Reported Speech.** Change the sentences from the text F with the direct speech into the reported ones.

Example: A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Infinitive/Complex-with-the-Infinitive-Object.** In the text F find the sentences with the Infinitive/Infinitive Object and translate them following the rules.

**3. Revise the topic Present Continuous Tense (active/passive).** In the text F find the sentences with the verbs in Present Continuous and analyze its use.

## TEXT G

### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

sea / demise / beaches / the end of this century / coastlines / tourist / hot-spots / lose / worst / underwater / climate change / extinction / sandy / trend / emissions  
Have a chat about the topics you liked. Change topics and partners frequently.

**2. Sea wall:** Students A believe we should build sea walls to protect beaches; Students B believe that's silly.

Change partners again and talk about your conversations.

**3. No beaches:** What would life be like with no beaches? Complete this table with your partner(s). Change partners often and share what you wrote.

	Effects	Good Things	Bad Things
Tourism			
Local life			
Coastline			
Wildlife			
Erosion			
Other			

**4. Climate change:** Rank these with your partner. Put the best things to fight climate change at the top. Change partners often and share your rankings.

Cycling/No baths/Vegetarianism/Electric cars/More recycling/No flying/  
Drink tap water/Walk everywhere

### Pre-text exercises

**1. Vocabulary. Match the words on the left with their definitions on the right:**

#### Paragraph 1

- |                                      |   |
|--------------------------------------|---|
| 1. demise<br>2. century<br>3. vanish | a. The end or failure of something.<br>b. Popular places of activity or entertainment.<br>c. A period of one hundred years. |
|--------------------------------------|---|

- |                    |   |
|--------------------|---|
| 4.path             | d. The gradual destruction or reduction in size of something.                             |
| 5.erosion          | e. Gradually cease to exist.  |
| 6.hot-spots        | f. The course or direction in which a person or thing is moving.                          |
| 7.surging          | g. Increasing suddenly and powerfully, typically during a usually stable or quiet period. |
| <b>Paragraph 2</b> |   |
| 8. predicted       | h. Made a problem, bad situation, or negative feeling worse.                              |
| 9. end up          | i. Of soil, rock, or land, etc. being gradually worn away naturally.                      |
| 10 substantial     | j. Said or estimated that a specified thing would happen in the future.                   |
| 11.eroding         | k. A general direction in which something is developing or changing.                      |
| 12 exacerbated     | l. Eventually reach or come to a specified place, state, or course of action.             |
| 13 trend           | m. Able to be maintained at a certain rate or level.                                      |
| 14 sustainable     | n. Of considerable importance, size, or worth.  |

**2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text G check your answers:**

1. Climate scientists said 50% of our beaches could disappear by 2100.
2. The scientists say climate change is threatening our beaches.
3. The scientists say tourist hot-spots are safe from the beach erosion.
4. Brazil's Copacabana Beach will not be affected by rising sea levels.
5. Some countries in Africa will lose over 60% of their beaches.
6. Australia will be the worst affected country in the world.
7. Scientists say most of the world's sandy beaches will not disappear.
8. Scientists said there were 10 things we can do to save our beaches.

**Listen to/read the text G and do the text-based exercises:**

### **Half of world's beaches could disappear by 2100**

Rising sea levels could see the demise of half of the world's beaches by the end of this century. Climate scientists predict that 50 per cent of sandy beaches along the world's coastlines could be vanished over the next eight decades if climate change continues on its current path. The scientists are from the European Commission's Joint Research Centre. They warned that the shorelines of many highly-populated areas and tourist hot-spots were threatened by erosion from climate change and surging sea levels. Areas at risk of disappearing forever include well-known, popular beaches in Australia's Surfers' Paradise, the islands of Hawaii, Brazil's Copacabana Beach, and the Costa del Sol in Spain.

The scientists reported that countries like The Gambia and Guinea-Bissau in Africa are predicted to lose over 60% of their beaches. The country to be worst affected is Australia, where 12,000km of coastline could end up underwater forever. The researchers wrote that: "A substantial proportion of the world's sandy coastline is already eroding, a situation that could be exacerbated by climate change. This could result in the near extinction of the world's sandy beaches by the end of the century." Research co-author Dr Michalis Voutsoukas said there were two important ways we could reduce this trend and save the beaches. He said we had to, "reduce emissions and manage our coastline in a more sustainable way".

### **Text-based exercises**

#### **1. Synonym match: Match the following synonyms from the article.**

- |                |                 |
|----------------|-----------------|
| 1. Demise      | a. course       |
| 2. Predict     | b. method       |
| 3. Path        | c. impacted     |
| 4. Threatened  | d. increasing   |
| 5. Surging     | e. considerable |
| 6. Affected    | f. forecast     |
| 7. Substantial | g. movement     |
| 8. Exacerbated | h. end          |
| 9. Trend       | i. worsened     |
| 10. Way        | j. endangered   |

#### **2. Phrase match: (Sometimes more than one choice is possible.)**

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| 1. see the demise of                | a. reduce this trend              |
| 2. coastlines could vanish          | b. of disappearing forever        |
| 3. shorelines of many               | c. exacerbated by climate changes |
| 4. surging                          | d. over the next eight decades    |
| 5. Areas at risk                    | e. the world's sandy beaches      |
| 6. coastline could end              | f. sea levels                     |
| 7. a situation that could be        | g. up underwater forever          |
| 8. result in the near extinction of | h. a more sustainable way         |
| 9. two important ways we could      | i. half of the world's beaches    |
| 10. manage our coastline in         | j. highly-populated areas         |

#### **3. Put the words in the right order to make sentences:**

- The beaches . of demise the half world's of
- world's the beaches along could coastlines Sandy vanish .
- on continues change its path . climate If current
- of highly and Shorelines tourist areas populated hot-spots .
- of Areas forever beaches . at disappearing include risk
- country affected be is worst Australia . to The
- is The already coastline sandy eroding . world's
- the of extinction beaches . world's sandy near The
- reduce this could trend . important Two ways we
- our Manage in a way . coastline sustainable more



## Discussion

### 1. Answer the questions:

1. Who predicted that half of the world's beaches could disappear?
2. What did the scientists say might continue along its current path?
3. What organisation is the Joint Research Centre part of?
4. How long did the scientists say the beaches could disappear for?
5. Which island's beaches did the article say were at threat?
6. Which African country was mentioned besides Guinea-Bissau?
7. How much of Australia's beaches could end up under water?
8. What did scientists say is exacerbating the problem?
9. Who is Michalis Voudoukas?
10. How many ways did scientists give for helping to save our beaches?

### 2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.

#### Role A – Cycling

You think cycling is the best thing to fight climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): showers, not baths, vegetarianism or electric cars.

#### Role B – Showers, Not Baths

You think showers, not baths is the best thing to fight climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): cycling, vegetarianism or electric cars.

#### Role C – Vegetarianism

You think vegetarianism is the best thing to fight climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): showers, not baths, cycling or electric cars.

#### Role D – Electric Cars

You think having only electric cars is the best thing to fight climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): showers, not baths, vegetarianism or cycling.

### 3. You are divided into two groups A and B. Ask your partner from the other group the following questions:

#### Student A's questions

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'sand'?
3. What do you think of beaches?
4. How important are beaches?
5. How bad would it be if half the world's beaches disappeared?
6. What is your favourite beach?
7. Why do people like beaches so much?
8. What are the bad things about beaches?
9. How much is climate change responsible for beaches disappearing?
10. How would the loss of beaches affect you?

#### Student B's questions

11. Did you like reading this article? Why/why not?
12. What do you think of when you hear the word 'beach'?
13. What do you think about what you read?
14. What purpose do beaches serve?
15. What impact would the loss of beaches have on a country?
16. Are beaches better than countryside?
17. How would the extinction of beaches affect the society of a country?
18. What different kinds of beaches are there?
19. How can we reduce emissions?
20. What questions would you like to ask the researchers?

### Grammar

**1. Revise the topic Reported Speech.** Change the sentences from the text G with the direct speech into the reported ones.

Example: A top botanist, Professor Alexandre Antonelli, said: "We are living in an age of extinction. – A top botanist, Professor Alexandre Antonelli, said (that) we were living in an age of extinction.

**2. Revise the topic Sequence of Tenses.** In the text G find the complex sentences in which the rules of Sequences are followed and analyze them.

**3. Revise the topic Complex-with-the-Infinitive-Subject.** In the text G find the sentences with this construction and analyze it.

### TEXT H

#### Warm-ups

**1. Chat:** In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

ambitious / measures / production / plastics / supermarkets / nationwide / bags / pollution / daily life / culture / consumption / urgent / policies / waste / manage

Have a chat about the topics you liked. Change topics and partners.

**2. Ban:** Students A believe all plastics should be banned;

Students B believe this would be silly.

Change partners again and talk about your conversations.

**3. Alternatives:** How necessary is it for these things to be plastic? What are the alternatives to plastic? How much better would they be? Complete this table with your partner(s). Change partners often and share what you wrote.

Plastic...	How Necessary?	Alternatives	How Much Better?
straws			
pens			
cutlery			
bottles			
bags			
kitchen wrap			

**4. Pollution:** Rank these with your partner. Put the worst effects of plastic pollution at the top. Change partners and share your rankings.

Littered streets/Dirty rivers/Micro-plastics in food chain/  
Plastics in whales' stomachs/Release of toxins/Use of oil/  
Ocean garbage patches/Groundwater pollution

### Pre-text exercises

#### 1. Vocabulary. Match the words on the left with their definitions on the right:

##### Paragraph 1

- |                 |  |
|-----------------|--|
| 1.unveiled      | a. Greatly reduce a price, quantity, etc.  |
| 2.drastically   | b. Of a substance or object capable of being broken down and returned to nature by bacteria or other living organisms. |
| 3.measures      | c. Showed or announced publicly for the first time.  |
| 4.slash         | d. Of one or more things available as another possibility.   |
| 5.biodegradable | e. In a way that is likely to have a strong or far-reaching effect.  |
| 6.vast          | f. A plan or course of action taken to achieve a particular purpose.   |
| 7.alternative   | g. Of very great extent or quantity; immense.  |

##### Paragraph 2

- |               |   |
|---------------|---|
| 8. sources    | h. Deal effectively with something difficult.                               |
| 9. ubiquitous | i. A place, person, or thing from which something comes or can be obtained. |
| 10 set        | j. Appearing, or found everywhere.  |
| 11.intensity  | k. Dependence on or trust in someone or something.                          |
| 12 reliance   | l. Of extreme force, degree or passion.                                     |
| 13 curb       | m. Decide on.   |
| 14 cope       | n. Restrain or keep in check.   |

#### 2. Read the headline. Guess if 1-8 below are true (T) or false (F). After listening/reading the text H check your answers:

1. China will outlaw all single-use plastics by the year 2025.
2. China will measure things to slash single-use plastics.
3. Non-biodegradable plastic bags will be banned in cities by 2025.
4. Plastic cutlery used by takeaways will be banned by the end of 2020.
5. The article said single-use plastics are a ubiquitous part of our life.
6. China cut plastic bag production by 67 billion in 2008.
7. The UN said more countries should follow China's lead.
8. The UN said we can cope with the amount of plastic waste.

#### Listen to/read the text H and do the text-based exercises:

##### China plans to reduce single-use plastics

China has unveiled ambitious plans to drastically reduce single-use plastics by 2025. China's National Development and Reform Commission is fast-tracking a number of measures designed to slash the production and use of plastics over the next five years. It announced that by the end of 2020, non-biodegradable plastic bags will have been banned in supermarkets and shopping malls in major cities. The ban will also apply to food delivery services, which use vast amounts of the plastics. Single-use plastic straws and cutlery used by food takeaway services will have been banned nationwide by the end of this year. China will encourage the use of alternative materials such as non-plastic products and biodegradable shopping bags.

Single-use plastics are one of the world's biggest sources of plastic pollution. They have become a ubiquitous part of daily life and a part of our throwaway culture. The Chinese authorities set a goal of reducing the "intensity of consumption" in order to reverse our reliance on single-use plastics. Previous regulations to curb plastic use, in 2008, led to an estimated cut in plastic bag production of 67 billion bags. The United Nations said it was urgent that all countries adopt policies similar to those China was introducing. It said: "We are already unable to cope with the amount of plastic waste we generate, unless we rethink the way we manufacture, use and manage plastics."

### Text-based exercises

#### 1. Synonym match: Match the following synonyms from the article.

- |                |                |
|----------------|----------------|
| 1. Unveiled    | a. dependence  |
| 2. Drastically | b. enormous    |
| 3. Slash       | c. manage      |
| 4. Vast        | d. seriously   |
| 5. Alternative | e. pressing    |
| 6. Ubiquitous  | f. control     |
| 7. Reliance    | g. replacement |
| 8. Curb        | h. revealed    |
| 9. Urgent      | i. omnipresent |
| 10. Cope       | j. cut         |

#### 2. Phrase match: (Sometimes more than one choice is possible.)

- |   |                                |
|---|--------------------------------|
| 1. ambitious plans to drastically         | a. amount of the plastic       |
| 2. fast-tracking a number                 | b. alternative materials       |
| 3. food delivery services, which use vast | c. those China is introducing  |
| 4. Single-use plastic straws              | d. of measures                 |
| 5. China will encourage the use of        | e. on single-use plastic       |
| 6. They have become a ubiquitous          | f. the amount of plastic waste |
| 7. part of our throwaway                  | g. reduce single-use plastics  |
| 8. reverse our reliance                   | h. culture                     |
| 9. adopt policies similar to              | i. part of daily life          |
| 10. We are already unable to cope with    | j. and cutlery                 |

#### 3. Put the words in the right order to make sentences:

- to plans drastically plastics . reduce single-use Ambitious
- to designed of production . number slash A measures
- plastic bags Non-biodegradable banned be supermarkets . in will

4. cutlery by used food services . and takeaway Straws
5. China encourage the will of materials . alternative use
6. of pollution . of world's sources the biggest One
7. They part a ubiquitous of have become life .
8. is countries adopt that It all urgent policies .
9. waste . amount the Unable of cope with to
10. way we rethink we plastics . the Unless manufacture

## Discussion

### 1. Answer the questions:

1. What has China done to ambitious plans to reduce single-use plastics?
2. What is China doing to measures to slash the production of plastic bags?
3. By when will non-biodegradable plastic bags be banned in supermarkets?
4. What will takeaways not be able to use besides plastic straws and bags?
5. What is China encouraging the use of besides non-plastic products?
6. What adjective described how much plastics are part of our life?
7. What kind of culture did the article say single-use plastics were part of?
8. What did China say we needed to reverse?
9. What did the UN say it was urgent for other countries to adopt?
10. What did the UN say we were unable to cope with?

### 2. You are a member of a team (A/B/C/D). Present your team's ideas to the others.

#### **Role A – Micro-Plastics in Food Chain**

You think Micro-plastics in the food chain is the biggest problem with plastics. Tell the others three reasons why. Tell them why their problems aren't as bad. Also, tell the others which is the most manageable of these (and why): plastics in whales' stomachs, ocean garbage patches or littered streets.

#### **Role B – Plastics in Whales' Stomachs**

You think plastics in whales' stomachs is the biggest problem with plastics. Tell the others three reasons why. Tell them why their problems aren't as bad. Also, tell the others which is the most manageable of these (and why): micro-plastics in the food chain, ocean garbage patches or littered streets.

#### **Role C – Ocean Garbage Patches**

You think ocean garbage patches is the biggest problem with plastics. Tell the others three reasons why. Tell them why their problems aren't as bad. Also, tell the others which is the most manageable of these (and why): plastics in whales' stomachs, micro-plastics in the food chain or littered streets.

#### **Role D – Littered Streets**

You think littered streets is the biggest problem with plastics. Tell the others three reasons why. Tell them why their problems aren't as bad. Also, tell the others which is the most manageable of these (and why): plastics in whales' stomachs, ocean garbage patches or micro-plastics in the food chain.

**3. You are divided into two groups A and B. Ask your partner from the other group the following questions:**

**Student A's question**

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'plastic'?
3. What do you think of plastic?
4. How many of the things you have are made of plastic?
5. What do you think of China's plans?
6. How can you reduce the amount of plastic you use?
7. Should all supermarkets ban plastic bags?
8. How bad are plastic straws and cutlery?
9. What happens to all the plastic we throw away?
10. What harm does plastic trash do to the environment?

**Student B's question**

11. Did you like reading this article? Why/not?
12. What do you think of when you hear the word 'bags'?
13. What do you think about what you read?
14. Can we live without plastic?
15. How much of a throwaway culture do we live in?
16. Why do we consume so much stuff these days?
17. What will happen if we do not cut down on plastic?
18. How can we re-use a plastic bottle, straw and cutlery?
19. Would it be easy for you to rethink your use of plastic?
20. What questions would you like to ask a plastic manufacturer?

**Grammar**

- 1. Revise the topic Reported Speech.** Change the sentence from the text H with the direct speech into the reported ones.
- 2. Revise the topic Sequence of Tenses.** In the text H find the complex sentences in which the rules of Sequences are followed and analyze them.
- 3. Revise the topic Future Simple/Future Perfect Simple.** In the text H find the sentences with the verbs used in these tenses and analyze their use.

**Інтернет-посилання на аудіо-супроводження**

1. TEXT A. Two-fifths of world's plants at risk of extinction  
<https://breakingnewsenglish.com/2010/201002-plant-extinction-1.html>
2. TEXT B. Most of world's rivers damaged by humans  
<https://breakingnewsenglish.com/2102/210221-rivers-1.html>
3. TEXT C. Balloons deadliest plastic for seabirds  
<https://breakingnewsenglish.com/1903/190324-balloons-1.html>
4. TEXT D. Scientists make biodegradable plastic  
<https://breakingnewsenglish.com/2104/210424-biodegradable-plastic-1.html>

5. TEXT E. Arctic Circle sees highest-ever temperatures  
<https://breakingnewsenglish.com/2006/200626-arctic-circle-1.html>
6. TEXT F. Ecocide could become an international crime  
<https://breakingnewsenglish.com/2012/201205-ecocide-1.html>
7. TEXT G. Half of world's beaches could disappear by 2100  
<https://breakingnewsenglish.com/2003/200306-beaches-1.html>
8. TEXT H. China plans to reduce single-use plastics  
<https://breakingnewsenglish.com/2001/200122-single-use-plastics-1.html>

Навчальне видання

## МЕТОДИЧНІ ВКАЗІВКИ

до практичних та самостійних занять з дисципліни

«ІНОЗЕМНА МОВА (АНГЛІЙСЬКА)»

*(для здобувачів вищої освіти напряму підготовки «Екологія»).*

3-й рік навчання

Укладач:  
Н.О. БАРВІНА

Оригінал-макет *Н.О.Барвіна*

Підписано до друку \_\_\_\_\_

Формат 60x84<sup>1</sup>/<sub>16</sub>. Папір типограф. Гарнітура Times.

Друк офсетний. Умов. друк. арк. №. Облік. вид. арк. \_\_\_\_\_.

Тираж \_\_\_\_ екз. Вид. № \_\_\_\_\_. Замов. № \_\_\_\_\_. Ціна договірна.

Видавництво Східноукраїнського національного університету  
імені Володимира Даля

Адреса видавництва: просп. Центральний, 59-А

тел. +38 (050) 218 04 78, факс (064 52) 4 03 42

e-mail: [izdat@snu.edu.ua](mailto:izdat@snu.edu.ua)