

Читати, перекладати два тексти.

Виписати проблеми навколишнього середовища, запропонувати своє вирішення до кожної з них за прикладом

3 f

Vocabulary

1 ★ Match the words to make phrases.

1	final	A exploration
2	solar	B war
3	space	C frontier
4	nuclear	D system
5	carbon	E fiction
6	science	F dioxide

2 ★ Complete the sentences with the phrases from Ex. 1.

- The Earth's atmosphere contains gas.
- Space is often referred to as the; the unexplored territory.
- The is made up of all the planets that orbit the sun.
- Every new step we make in advances our knowledge of the universe.
- The film is set on Mars.
- The threat of is frightening.

3 ★ Choose the correct word.

- With new technologies the possibilities for space travel are **continuous/endless**.
- The Earth has rich **supplies/resources** like natural gas and oil.
- Solar panels **construct/generate** electricity from sunlight.
- Mankind still has many challenges to **pass/overcome** before space colonisation becomes a reality.
- The satellite will **leap/orbit** the earth for the next six years.
- Astronomers revealed that a comet could **extract/wipe out** life on Earth.

4 ★ Fill in: harsh, catastrophe, race, colonies, warms up, release, afford, self-sufficient.

- In the future, scientists hope to build in space.
- The weather always in summer.
- Not all governments can to invest money in space travel.
- One day, new technologies will make humans in space as they will be able to produce what they need.
- Cars toxic emissions that damage our environment.
- Global warming could lead to an environmental
- Astronauts wear space suits to protect them from the environment of outer space.
- Will the human survive in the future?

Grammar

5 ★ Rewrite the following as **mixed conditional** sentences.

- Mark didn't study, so he won't pass his science test.
.....
- Jane arrived on time, so she will have enough time to visit the planetarium.
.....
- He isn't well-qualified, so he didn't get the job at the space centre.
.....
- They didn't buy cinema tickets, so they can't see the new science fiction film tonight.
.....
- Emily wasn't told about it, so she isn't at the science fair now.
.....
- The researcher was working late last night, so he is exhausted now.
.....
- Sally doesn't take her studies seriously, so she didn't get into university.
.....

Reading

1 ★ Read the article. questions 1.6, choose correct answer A, B, C or D.

1 How did Michael Reynolds get his name?
A from his use of recycling
B due to the large amount of recycling he does every day
C from being the first to recycle every type of rubbish
D because he recycles almost every type of rubbish

2 'Earthships'
A do not cost anything to build
B recycle their own water
C don't consume energy.
D can generate their own electricity.

3 What problem did Michael encounter when he started building earthships?
A He couldn't find materials for his work.
B Other architects interfere with his work.
C His designs did not conform with building regulations.
D Nobody wanted his designs.

4 What finally helped Michael's ideas become accepted?
A changes in building regulations
B the architectural firm he worked for
C rebuilding after a disaster
D building homes in a remote area

5 Michael believes 'biodesign'
A is the answer to solving environmental problems
B will solve so many environmental problems
C will spread around the world
D will solve our energy problems

6 Michael feels 'biodesign' is important because
A create new energy
B shouldn't use fossil fuels
C should fight climate change
D create a better world

Reading

- 1 ★ Read the article. For questions 1-6, choose the correct answer A, B, C or D.
- How did Michael Reynolds get the name the 'Rubbish Warrior'?
 - from his use of recycling
 - due to the large amount of recycling he does every day
 - from being the first to recycle
 - because he recycles almost every type of rubbish
 - 'Earthships'
 - do not cost anything to run.
 - recycle their own water.
 - don't consume energy.
 - can generate their own electricity.
 - What problem did Michael encounter when he started building earthships?
 - He couldn't find materials.
 - Other architects interfered with his work.
 - His designs did not comply with building regulations.
 - Nobody wanted his work.
 - What finally helped Michael's work become accepted?
 - changes in building regulations
 - the architectural community
 - rebuilding after disasters
 - building homes in New Mexico
 - Michael believes 'biotecture'
 - is the answer to all environmental problems.
 - will solve some important environmental issues.
 - will spread around the world.
 - will solve our energy shortages.
 - Michael feels 'biotects'
 - create new ecosystems.
 - shouldn't use natural resources.

Meet the Rubbish Warrior

3g

He has been called the 'The King of Rubbish', 'The Rubbish Architect' and most recently the 'The Rubbish Warrior'. Michael Reynolds doesn't just collect rubbish and recycle it; he turns it into sustainable green homes known as 'earthships'. These eco-friendly houses are made from natural and recycled materials. Anything from old tyres, glass, plastic bottles and tins to old electrical appliances and cars are used as building materials. The homes are self-sufficient with solar panels and wind turbines to generate electricity. They also have rainwater collection systems and a constant inside temperature that allows residents to grow a small vegetable and fruit garden indoors. All these design factors contribute to the total independence of the home by using natural resources. By providing their own power and water, operation costs of these earthships are low with little to no utility bills. Building materials are also inexpensive, making these homes affordable for everyone.

Trained as an architect, Michael responded to concerns back in the 1970s about the ever increasing rubbish problem and environmental crisis by building sustainable homes out of the rubbish. 'Thirty five years ago I saw dark clouds on the horizon ... Lots of people also saw the environmental crisis coming but weren't inspired to do anything. They thought I was a fool going to the dump and recycling rubbish before recycling even existed.' Michael says, looking back. Well, no one is laughing at him anymore. After years of being snubbed by the architectural community and battling outdated building laws, Michael's work is now being taken very seriously. He started with building homes for himself and like-minded people in New Mexico. The owners appreciated the homes and understood their importance but publicly they were still seen as radicals. The value of Michael's work came into the spotlight when he and his team were invited to the tsunami hit area of the Bay of Bengal in 2004. Michael and his team passed on their knowledge to the desperate people there while at the same time building several critical shelters with the tons of rubbish left behind from the disaster. This provided Michael with the opportunity to experiment and create some of his most inspired designs while not being restricted by building regulations. The homes are earthquake and hurricane proof and built to collect rainwater. Michael and his crew have visited other disaster areas to help rebuild communities including areas hit by hurricane Katrina and more recently the earthquake in Haiti in 2010. As word catches on, his designs have spread to every corner of the globe. Michael has even created a name for his type of work, 'biotecture' to describe the designing of buildings with the goal of sustainability. According to Michael it's a sort of 'combination of biology and architecture' that addresses a number of serious problems now facing mankind. When rubbish becomes the building material, less waste goes to overburdened landfill sites.

Shortages of water and energy are eased when households create their own supply. Michael calls himself and others working like him 'biotects' and sees their creations not just as homes but as an alternative way of living. "Earthships are a model of the future that goes beyond house and architecture," he explains. Residents become an active part of their local ecosystem, living hand in hand with nature and not just consuming it. It's a sustainable way of living that this warrior will continue to fight for.





WHAT IS DEFORESTATION?

Deforestation occurs (0) when people cut down whole forests of trees. Tropical rainforests are particularly **under threat**. Two thirds (1) the lowland tropical rainforests in Central America, for instance, have (2) turned into land for grazing since 1950.

Why is it happening?

Small farmers cut down a few acres of trees (3) order to grow crops or let their animals **graze**. They clear them in a process called "slash and burn". Loggers also cut down a lot of trees (4) wood and paper products and urban developers turn areas of forest into mines, new roads, homes, or factories. Natural factors (5) as wildfires sometimes contribute to deforestation, too.

Why is it such a problem?

Deforestation is a major threat to the **delicate** ecosystem of our planet. Basically, it destroys the homes of animal and plant species and many of them die (6) including many unique species that could be used to make medicines for some of the world's worst diseases. More (7) two thirds of all medicines with cancer-fighting properties, for example, come from rainforest plants. Also, trees **absorb harmful** greenhouse gases. When forests are cut (8) or burnt, most of these gases stay in the Earth's atmosphere, (9) speeds up global warming. In fact, in the next 24 hours, deforestation will (10) responsible for the **release** of as much CO₂ into the atmosphere as that from as (11) flights as it takes to carry 8 million people from London to New York!

How can we help to fight deforestation?

- Take part in tree-planting days to replace some of the lost trees.
- Recycle paper and buy recycled paper products such as notepads.
- Eat less meat or at least check where it has come from. If it's from rainforest areas, it's likely that rainforests were cut down in order to raise cattle.
- Encourage your family, friends, and neighbours to think (12) the rainforests too by telling them all about the issue and how they can help.
- Support charities and companies that support rainforest protection by donating money and buying wood products like furniture made from sustainable forests*.

*forests grown for commercial use

RAINFORESTS: FAST FACTS

- Tropical rainforests cover 6-7% of the Earth's surface. The largest are: 1) The Amazon, South America, 2) The Congo, Africa, 3) South East Asia, 4) New Guinea, 5) Madagascar.
- Areas of forest the size of 2 football fields are lost per second due to deforestation. If this rate continues, the world's rainforests will disappear within 100 years.
- Rainforests **are home to** over half the plant and animal species in the world. 137 species become extinct every day.

Check these words

tropical rainforest, turn into, slash and burn, logger, urban developer, mine, contribute, major threat, ecosystem, include, die out, unique species, disease, cancer-fighting properties, greenhouse gas, global warming, sustainable, commercial

1 Read the title and subheadings in the text. Can you answer any of these questions? Read the text and check.

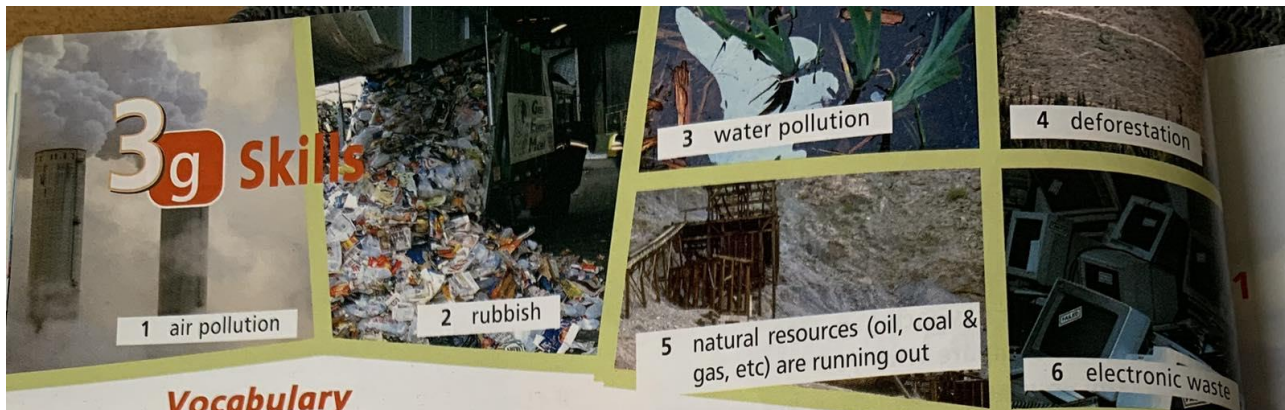
2 Read the text again and fill in the gaps with a word which best fits, as in the example. Listen and check

3 Replace the highlighted words with the words in bold from the text.

- 1 Rainforests accommodate animals such as raccoons, giant salamanders and mountain beavers.
- 2 Plants set free oxygen into the atmosphere during photosynthesis.
- 3 Rainforests are in danger.
- 4 Coral reefs are very easy to damage.
- 5 Most of the plants take in damaging gases.
- 6 Sheep and cows eat the grass and plants in the field.

THINK! Imagine plants and trees could talk. What could they tell us about deforestation? In three minutes, write a few sentences. Tell your partner or the class.

ICT Find out more information about deforestation. Use the key word: deforestation. Tell the class.



3g Skills

1 air pollution

2 rubbish

3 water pollution

4 deforestation

5 natural resources (oil, coal & gas, etc) are running out

6 electronic waste

Vocabulary Environmental problems

- 1 a) Listen and say.
- b) Match the problems (1-6) to their solutions (A-F). Which problems are the most serious in your country?

- A We should all ride bicycles instead of using cars.
- B We should recycle at home and try to reuse things.
- C We must find new sources of renewable energy.
- D We should stop cutting down trees.
- E Manufacturers should be responsible for disposing of old electronic equipment.
- F We should use non-chemical biodegradable detergents.

Listening

- 3 You're going to listen to Matt talking about a project. Listen and choose the correct answer.
- 1 Matt grew up in
 A a big city. B the country
 C Lynton.
- 2 Matt most dislikes
 A the crowds.
 B the architecture.
 C the pollution.