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**НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ І
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спеціальностей**

АНГЛІЙСЬКА МОВА

***ЗБІРНИК ЗАВДАНЬ І ВПРАВ ДЛЯ САМОСТІЙНОЇ РОБОТИ
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Збірник завдань і вправ для самостійної роботи з дисципліни «Англійська мова» для студентів агробіологічних спеціальностей заочної форми навчання [Текст] / Укл: О.Р. Журба. –«Компринт», 2015. – 96 с.

У навчально-методичному виданні «Англійська мова» зібрано, систематизовано й представлено значний обсяг автентичних фахових іншомовних текстів, які сприяють ефективному засвоєнню основних понять англійської фахової мови у процесі самостійної роботи. Може бути корисним для осіб, що вивчають мову самостійно чи вдосконалюють свої знання з англійської фахової мови, а також для викладачів та студентів аграрних вищих закладів.

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ВІД УКЛАДАЧА

В умовах інтенсифікації вивчення іноземної мови та на сучасному етапі розвитку української освіти в цілому, досить велика увага приділяється відповідності рівня та якості кваліфікації майбутнього фахівця європейським та світовим стандартам, оскільки з розширенням міжнародного співробітництва володіння іноземною фаховою мовою стало обов'язковою складовою професійної компетенції. Під впливом науково-технічної революції з'являються нові терміни та поняття у різних сферах науки і вони потребують якісного та адекватного перекладу. Саме тому в процесі вивчення англійської мови за фаховим спрямування перед студентом постає завдання засвоєння і опанування як загальнотехнічних термінів і понять, так і вузькоспеціалізованої фахової лексики, а для педагога актуальним стає пошук ефективних методів запам'ятовування та практичного оволодіння термінології. Отже, сучасність вимагає сучасних підходів до процесу навчання та вивчення англійської мови.

Процес оволодіння фаховою професійною іншомовною терміносистемою – це складний комплекс методичних та дидактичних засобів, якими користується педагог з метою реалізації основного завдання немовного вузу: нагромадження термінологічної лексики та активне її використання у процесі спілкування фаховою мовою, оскільки це стало обов'язковою складовою професійної компетенції.

Постійна та регулярна робота з автентичними іншомовними текстами забезпечує процеси пасивного і активного володіння терміносистемою певної галузі знань і науки. Важливо пам'ятати, що післятекстові вправи повинні будуватись на засадах розвитку комунікативних навичок студентів з урахуванням процесів закріплення і активізації іншомовного фахового матеріалу. Після опрацювання лексики важливо із пасивного оволодіння термінологією ввести її в активне шляхом використання слів в різних

ситуаціях мовлення і аудіювання, тобто активізувати продуктивну та цілеспрямовану мовленнєву діяльність студентів. У виданні запропоновано практичні вправи, спрямовані саме на активізацію комунікативного аспекту вивчення іноземної фахової мови.

Запропоновані у виданні способи та практичні завдання роботи з текстом є ефективними, оскільки вони дають змогу студентам не лише обробляти, осмислювати і критично оцінювати подану інформацію, виділяти певні особливості вживання тих чи інших англійських термінів в галузі, а й формувати термінологічну базу для подальшого висловлювання в межах даної теми. Отже, створюються оптимальні умови для засвоєння та нагромадження фахової спеціалізованої терміносистеми, певних граматичних правил та стилістичних особливостей кожної лексичної одиниці як окремо, так і в певному контексті. Комунікативно спрямовані та проблемні практичні вправи дозволяють урізноманітнити процес самостійного вивчення фахової англійської мови та зацікавити студентів.

Оволодіння іноземною мовою майбутніми фахівцями в умовах формування інформаційного суспільства, сприятиме підвищенню їхньої професійної компетентності на ринку праці, забезпечить якісні зміни у парадигмі аграрної освіти 21 століття.

Topic 1

START OF AGRICULTURE

Agriculture is the art and science of cultivating the soil, growing crops and raising livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets.



Agriculture provides most of the world's food and fabrics. Cotton, wool, and leather are all agricultural products. Agriculture also provides wood for construction and paper products.

These products, as well as the agricultural methods used, may vary from one part of the world to another.

Start of Agriculture

Over centuries, the growth of agriculture contributed to the rise of civilizations.

Before agriculture became widespread, people spent most of their lives searching for food – hunting wild animals and gathering wild plants. About 11,500 years ago, people gradually learned how to grow cereal and root crops, and settled down to a life based on farming.

By 2,000 years ago, much of the Earth's population had become dependent on agriculture. Scholars are not sure why this shift to farming took place, but it may have occurred because of climate change.

When people began growing crops, they also began herding and breeding wild animals. Adapting wild plants and animals for people to use is called domestication.

The first domesticated plant was probably rice or corn. Chinese farmers were cultivating rice as early as 7500 BCE.

The first domesticated animals were dogs, which were used for hunting. Sheep and goats were probably domesticated next. People also domesticated cattle and pigs. Most of these animals had once been hunted for hides and meat. Now many of them are also sources of milk, cheese, and butter. Eventually, people used domesticated animals such as oxen for plowing, pulling, and transportation.



Agriculture enabled people to produce surplus food. They could use this extra food when crops failed or trade it for other goods. Food surpluses allowed people to work at other tasks unrelated to farming.

Agriculture kept formerly nomadic people near their fields and led to

the development of permanent villages. These became linked through trade. New economies were so successful in some areas that cities grew and civilizations developed. The earliest civilizations based on intensive agriculture arose near the Tigris and Euphrates Rivers in Mesopotamia (now Iraq and Iran) and along the Nile River in Egypt.

Словник-мінімум

agriculture

art

science

cultivating

soil

crop

livestock

market

provide

food

fabric

cotton

wool

leather

contribute

century

widespread

hunting

wild animals

gather

сільське господарство

мистецтво

наука

обробка

грунт

сільськогосподарська культура

тваринництво

ринок

забезпечувати

їжа

тканина, матерія

бавовна

вовна

шкіра

робити внесок

століття

широко розповсюджений

полювання

дикі тварини

збирати

<i>gradually</i>	<i>поступово</i>
<i>grow</i>	<i>вирощувати</i>
<i>cereals</i>	<i>зурнові культури</i>
<i>root crops</i>	<i>коренеплоди</i>
<i>settle down</i>	<i>поселятися</i>
<i>farming</i>	<i>заняття сільським господарством</i>
<i>population</i>	<i>населення</i>
<i>scholar</i>	<i>вчений</i>
<i>shift</i>	<i>зміна</i>
<i>occur</i>	<i>виникати, з'являтися</i>
<i>climate change</i>	<i>зміни клімату</i>
<i>herding</i>	<i>випасання</i>
<i>breeding wild animals</i>	<i>розведення диких тварин</i>
<i>domestication</i>	<i>одомашнення, приручення диких тварин</i>
<i>rice</i>	<i>рис</i>
<i>corn</i>	<i>кукурудза</i>
<i>sheep</i>	<i>вівця</i>
<i>goat</i>	<i>коза</i>
<i>cattle</i>	<i>велика рогата худоба</i>
<i>pig</i>	<i>свиня</i>
<i>hide</i>	<i>шкура</i>
<i>meat</i>	<i>м'ясо</i>
<i>milk</i>	<i>молоко</i>
<i>cheese</i>	<i>сир</i>
<i>butter</i>	<i>масло</i>
<i>eventually</i>	<i>в кінцевому підсумку, врешті-решт</i>
<i>ox</i>	<i>бик</i>
<i>plowing</i>	<i>розорення земель</i>
<i>pulling</i>	<i>витягування</i>
<i>enable</i>	<i>неможливий</i>
<i>surplus</i>	<i>резервний, надлишковий</i>
<i>relate</i>	<i>відноситися</i>
<i>development</i>	<i>розвиток</i>
<i>permanent</i>	<i>тимчасовий</i>
<i>Village</i>	<i>поселення, село</i>
<i>Successful</i>	<i>успішний</i>

Вправа 1

Перекладіть словосполучення

Rise of civilization, wild plants, root crops, shift to farming, climate change, herding and breeding, domesticated plants, domesticated animals, produce surplus food, unrelated to farming, development of permanent villiages, successful economy, intensive agriculture.

Вправа 2

Дайте відповіді на запитання

1. What is agriculture?
2. What does agriculture include?
3. Which agricultural products can you call?
4. What did people do before the agriculture developed?
5. When did people become dependent on agriculture?
6. What does “domesticated” mean? Which plant and animals were domesticated?
7. What does “surplus food” mean?
8. Where did the earliest civilizations arise and why?

Вправа 3

Вставте пропущені слова

1. Agriculture is the art and of cultivating the soil, growing crops and raising livestock.
2. Over centuries, the growth of agriculture contributed to the rise of
3. Before agriculture became widespread, people spent most of their lives searching for food – wild animals and wild plants.
4.wild plants and animals for people to use is called domestication.
5. The first domesticated plant was probably or
6. People also domesticated and
7. Food surpluses allowed people to work at other tasks unrelated to
8. New economies were so successful in some areas that grew and civilizations developed.

Вправа 4

Знайдіть в тексті еквіваленти слів і словосполучень

Діяльність людини, вирощування сільськогосподарських культур, обробіток землі, галузі сільського господарства, високо розвинена галузь сільського господарства, вирощувати високі врожаї, орна земля, достатньо хорошого ґрунту, землеробство, тваринництво.

Topic 2

WHAT IS AGRICULTURE

Agriculture is a human activity in which people use areas of land to produce food, clothing and other necessary materials.



The word «ager» is a Latin word. It means a field. The word «agriculture» means the cultivation of fields and growing crops. But this is the old meaning of this word. Now it also means the use of land for breeding animals. At present there are two main branches of agriculture. They are crop growing and animal breeding.

We do not know when people began to grow crops. It was many thousand years ago. Now crop growing is a highly developed branch of agriculture.

The soil is the basis of agriculture. Enough food for all the people can be grown if there is sufficient good soil for crops to produce high yields.

There are two ways to grow enough food. They are the increase in area of arable land and the intensification of agricultural production in the areas already used for cropping. At present the second way is more important because there is not enough experience to reclaim tropical and subtropical lands.

The intensification of production in the traditional agricultural areas is based on the knowledge of climate, soils and their use, and on a large collection of high-yielding varieties and hybrids of agricultural crops.

All intensification factors, such as full mechanization, high application of fertilizers and extensive use of herbicides must be used in such a way as not to disturb the biological equilibrium of the soil.

Animal husbandry is fully dependent on crop growing and it is very important in a country's economics, too.

Thus, it may be said that the development of agriculture is an important factor in the development of national economy and it will result in the rise of living standard of people.

Словник-мінімум

agriculture

сільське господарство

<i>cultivation</i>	<i>обробіток, культивуація</i>
<i>to grow</i>	<i>виоцувати</i>
<i>Crop</i>	<i>сільськогосподарська культура</i>
<i>crop growing</i>	<i>рослинництво</i>
<i>to breed</i>	<i>розводити, виоцувати</i>
<i>animal</i>	<i>тварина</i>
<i>animal breeding</i>	<i>тваринництво</i>
<i>animal husbandry</i>	<i>тваринництво</i>
<i>branch</i>	<i>галузь</i>
<i>Soil</i>	<i>грунт</i>
<i>Yield</i>	<i>врожай</i>
<i>arable</i>	<i>орний</i>
<i>arable land</i>	<i>рілля, орна земля</i>
<i>intensification</i>	<i>інтенсифікація</i>
<i>to reclaim</i>	<i>освоювати</i>
<i>variety</i>	<i>сорт, вид</i>
<i>hybrid</i>	<i>гібрид</i>
<i>mechanization</i>	<i>механізація</i>
<i>application</i>	<i>застосування</i>
<i>increase</i>	<i>збільшення</i>
<i>fertilizer</i>	<i>добриво</i>
<i>extensive</i>	<i>екстенсивний</i>
<i>herbicide</i>	<i>гербіцид</i>
<i>to disturb</i>	<i>порушувати</i>

Вправа 1

Перекладіть словосполучення

the cultivation of fields, growing crops, to breed animals, main branches of agriculture, to produce high yields, the increase in area, used for cropping, arable land, the intensification of production, agricultural areas, high-yielding varieties, hybrids of agricultural crops.

Вправа 2

Дайте відповіді на запитання:

1. What kind of human activity is agriculture?
2. What is the origin of the word «ager»?
3. What does it mean?
4. What is the old and the new meaning of the word «agriculture»?

5. What branches of agriculture do you know?
6. What is the basis of agriculture?
7. When did people begin to grow crops?
8. When can enough food be grown?
9. What are the ways to grow enough food?
10. What way is more important? Why?
11. On what is the intensification of production based?
12. What intensification factors must be used?
13. In what way must they be used?

Вправа 3

Вставте пропущені слова

1. The ... is the basis of agriculture.
2. People use areas of ... to produce food and clothing.
3. Agriculture means the use of land to ... animals.
4. Crop ... is one of the agricultural branches.
5. There must be a large collection of high-yielding ... and hybrids of agricultural crops.

Вправа 4

Знайдіть в тексті еквіваленти слів і словосполучень

Діяльність людини, вирощування сільськогосподарських культур, обробіток землі, галузі сільського господарства, високо розвинена галузь сільського господарства, вирощувати високі врожаї, орна земля, достатньо хорошого ґрунту, землеробство, тваринництво.

Вправа 5

Розмістіть речення таким чином, щоб вони були планом прочитаного тексту

1. Agriculture provides people with different kinds of food.
2. The increase in crop yields can be done by applying fertilizers.
3. Agriculture is an important sector of economics.
4. The aim of agriculture is to produce much food.
5. When the crop does not grow well, it means that the conditions are bad for its growth.

Topic 3

AGRICULTURAL SCIENCE

In the early 1900s, an average farmer in the U.S. produced enough food to feed a family of five. Many of today's farmers can feed that family and a hundred other people. How did this great leap in productivity come about? It happened



largely because of scientific advances and the development of new sources of power.

By the late 1950s, most farmers in developed countries were using both gasoline and electricity to power machinery. Tractors had replaced draft animals and steam-powered machinery. Farmers were using machines in almost every stage of cultivation and livestock management.

Electricity first became a power source on farms in Japan and Germany in the early 1900s. By 1960, most farms in the U.S. and other developed countries were electrified. Electricity lit farm buildings and powered such machinery as water pumps, milking machines, and feeding equipment. Today, electricity controls entire environments in livestock barns and poultry houses.

Traditionally, farmers have used a variety of methods to protect their crops from pests and diseases. They have put herb-based poisons on crops, handpicked insects off plants, bred strong varieties of crops, and rotated crops to control insects. Now, almost all farmers, especially in developed countries, rely on chemicals to control pests. The definition of “pest” ranges from insects to animals such as rabbits and mice, as well as weeds and disease-causing organisms – bacteria, viruses, and fungi. With the use of chemicals, crop losses and prices have declined dramatically.

For thousands of years, farmers relied on natural fertilizer – materials such as manure, wood ash, ground bones, fish or fish parts, and bird and bat waste called guano – to replenish or increase nutrients in the soil.

In the early 1800s, scientists discovered which elements were most essential to plant growth: nitrogen, phosphorus, and potassium. Later, fertilizer containing these elements was manufactured in the U.S. and in Europe. Now, many farmers use chemical fertilizers with nitrates and phosphates because they greatly increase crop yields.

However, pesticides and fertilizers have come with another set of problems. The heavy reliance on chemicals has disturbed the environment, often destroying helpful species of animals along with harmful ones. Chemical use may also pose a health hazard to people, especially through contaminated water supplies. Agricultural scientists are looking for safer chemicals to use as fertilizers and pesticides. Some farmers use natural controls and rely less on chemicals.



Словник-мінімум

<i>average</i>	<i>середньостатистичний</i>
<i>leap</i>	<i>стрибок, різка зміна</i>
<i>scientific</i>	<i>науковий</i>
<i>advance</i>	<i>прогрес, успіх, поліпшення</i>
<i>developed countries</i>	<i>розвинуті країни</i>
<i>machinery</i>	<i>техніка</i>
<i>draft animals</i>	<i>тягова худоба</i>
<i>steam-powered machinery</i>	<i>паросилова техніка</i>
<i>electrified</i>	<i>електрифікований</i>
<i>lit</i>	<i>освітлювати</i>
<i>milking machines</i>	<i>доїльні машини</i>
<i>feeding equipment</i>	<i>устаткування подачі їжі</i>
<i>livestock barns</i>	<i>скотарня, корівник, хлів</i>
<i>poultry houses</i>	<i>пташник</i>
<i>protect</i>	<i>захищати</i>
<i>pests</i>	<i>сільськогосподарський шкідник, паразит</i>
<i>disease</i>	<i>захворювання</i>
<i>herb</i>	<i>трава, рослина</i>
<i>poison</i>	<i>отрута</i>
<i>insect</i>	<i>комаха</i>
<i>rotate crops</i>	<i>чергувати культури</i>
<i>rely on</i>	<i>залежати від</i>
<i>weed</i>	<i>бур'ян</i>
<i>fungi</i>	<i>гриби</i>
<i>price</i>	<i>ціна</i>

<i>decline</i>	<i>падіння, зниження; занепад</i>
<i>manure</i>	<i>гній</i>
<i>ash</i>	<i>попіл</i>
<i>bone</i>	<i>кістка</i>
<i>waste</i>	<i>відходи</i>
<i>guano</i>	<i>гуано</i>
<i>replenish</i>	<i>знову наповнювати, поповнювати</i>
<i>increase</i>	<i>збільшувати</i>
<i>nutrients</i>	<i>поживні речовини</i>
<i>harmful</i>	<i>шкідливий</i>
<i>water supplies</i>	<i>водозабезпечення</i>

Вправа 1

Знайдіть в тексті еквіваленти слів і словосполучень

scientific advances, development of new sources, to power machinery, stage of cultivation, lit farm buildings, livestock management, water pumps, variety of methods, to protect crops, to rely on chemicals, the use of chemicals, crop losses, thousands of years, increase nutrients in the soil, scientists discovered, essential to plant growth, increase crop yields, set of problems, destroy helpful species of animals, pose a health hazard, safer chemicals.

Вправа 2

Дайте відповіді на запитання

1. How did a great leap in productivity come about?
2. What did most farmers in developed countries use in late 1950s?
3. What did replace draft animals?
4. Where did the electricity become a power source on farms?
5. Which machinery did electricity power?
6. Why do farmers use a variety of protecting methods?
7. Which are these methods?
8. What is the definition of “pest”?
9. Why did crop losses and prices decline?
10. Which are the natural fertilizers used by farmers for thousand of years?
11. Which are the most essential elements for plant growth discovered in early 1800s?
12. Why do agricultural scientists look for safer chemicals?

Вправа 3

Складіть частини речень у одне

- | | |
|---|---|
| 1. Farmers were using machines... | a) ... a variety of methods to protect their crops from pests and diseases. |
| 2. Today, electricity controls... | b) ...rely on chemicals to control pests. |
| 3. Traditionally, farmers have used... | c) ...in almost every stage of cultivation and livestock management. |
| 4. Now, almost all farmers, especially in developed countries,.. | d) ... often destroying helpful species of animals along with harmful ones. |
| 5. Chemical use may also pose a health hazard to people,.. | e) ...entire environments in livestock barns and poultry houses. |
| 6. With the use of chemicals,.. | f) ...crop losses and prices have declined dramatically. |
| 7. The heavy reliance on chemicals has disturbed the environment,.. | g) ... especially through contaminated water supplies. |

Вправа 4

Перекладіть на англійську мову

Науковий прогрес, сотні людей, нові джерела енергії, більшість фермерів, сільськогосподарська техніка, етап обробітку землі, розвинуті країни, водні насоси, доїльні машини, устаткування подачі їжі, пташник, різноманітність методів, захист сільськогосподарських культур, шкідники і захворювання (враження), чергувати культури, залежати від застосування хімікатів, комахи, бур'яни та організми-шкідники, зниження цін, збільшити вміст поживних речовин у ґрунтах, найнеобхідніші елементи, добрива, хімічні добрива, збільшувати збір урожаю, ряд проблем, становити загрозу здоров'ю людей, вчені-ґрунтознавці.

Вправа 5

Визначте, чи вірне твердження

1. In the early 1900s, an average farmer in Japan produced enough food to feed a family of five.
2. By the late 1950s, most farmers in developed countries were using both gasoline and electricity to power machinery.
3. Tractors had replaced poultry and steam-powered machinery.

4. Steam lit farm buildings and powered such machinery as water pumps, milking machines, and feeding equipment.
5. Traditionally, farmers have used a variety of methods to protect their crops from pests and diseases.
6. Now, almost all farmers, especially in developed countries, rely on chemicals to control pests.
7. Now, almost all farmers, especially in the U.S., rely on chemicals to control pests.
8. The definition of “pest” means insects.
9. Scientists discovered which elements were most essential to plant growth: nitrogen, phosphorus, and potassium.
10. The heavy reliance on chemicals helped the environment.
11. Some farmers use chemical controls so they rely on chemicals.

Вправа 6

Заповніть пропуски необхідними словами із тексту

1. Many of today's ... can feed that family and a hundred other people.
2. Farmers were using machines in almost every ... and livestock management.
3. By 1960, most farms in the U.S. and other developed countries were
4. Today, ... controls entire environments in livestock barns and poultry houses.
5. They have put herb-based poisons on ..., handpicked insects off plants, bred strong varieties of crops, and rotated ... to control insects.
6. With the use of chemicals, crop losses and ... have declined dramatically.
7. For thousands of years, farmers ... natural fertilizer – materials such as manure, wood ash, ground bones, fish or fish parts, and bird and bat waste called ... – to replenish or increase ... in the soil.
8. Later, fertilizer ... these elements was manufactured in the U.S. and in Europe.
9. However, pesticides and fertilizers have come with another
10. The heavy reliance on chemicals has disturbed the environment, often destroying ... of animals along with harmful ones.

Вправа 7

Перекладіть речення на українську мову

1. In the early 1900s, an average farmer in the U.S. produced enough food to feed a family of five.

2. It happened largely because of scientific advances and the development of new sources of power.

3. Farmers were using machines in almost every stage of cultivation and livestock management.

4. Electricity first became a power source on farms in Japan and Germany in the early 1900s. By 1960, most farms in the U.S. and other developed countries were electrified.

5. Electricity lit farm buildings and powered such machinery as water pumps, milking machines, and feeding equipment.

6. Traditionally, farmers have used a variety of methods to protect their crops from pests and diseases.

7. The definition of “pest” ranges from insects to animals such as rabbits and mice, as well as weeds and disease-causing organisms – bacteria, viruses, and fungi.

8. For thousands of years, farmers relied on natural fertilizer – materials such as manure, wood ash, ground bones, fish or fish parts, and bird and bat waste called guano – to replenish or increase nutrients in the soil.

9. In the early 1800s, scientists discovered which elements were most essential to plant growth: nitrogen, phosphorus, and potassium.

10. The heavy reliance on chemicals has disturbed the environment, often destroying helpful species of animals along with harmful ones.

Topic 4

PROGRESS IN AGRICULTURE

The scientific and technological progress means the development and improvement of agriculture on the basis of wide application of highly effective implements and other means of production, the progressive technology and science-based management with the use of modern achievements of science and engineering, the cultural and technical rise of the people in agriculture.



Science is more and more becoming a productive force. Biologists, breeders, physiologists, geneticists, soil scientists, chemists, farm machinery designers, livestock experts and economists have already done and are still to do a great deal of research and to achieve important results.

The main roads of the scientific and technological revolution in agriculture are the following:

- technical re-armament of this branch of the national economy,
- large-scale mechanization of agricultural operations;
- electrification and automation of agricultural operations;
- further development of basic agricultural science;
- chemicalization of agriculture;
- development of new crop varieties and hybrids.

Among these factors mechanization occupies the most important place, providing the basis for the growth of agricultural produce. The introduction of what is called the machine system for the mechanization of agricultural production processes is a big step forward. It provides a scientific solution of the problems of farm machinery development and production.



Another problem is an increase in the production of grain. Much of the success in solving the tasks facing the farmer comes from the introduction of research into the plant growing.

The acreage of trial plots in our country is rather significant. To make the work of plant breeders more productive steps are to be taken to mechanize all laboratory and field jobs in selective-breeding centers. The notable features of all

selective breeding and seed production machines must be reliability, operational simplicity and high maneuverability.

The practical application of new scientific ideas is today as important as their development.

Словник-мінімум:

<i>implement</i>	<i>знаряддя</i>
<i>management</i>	<i>управління</i>
<i>application</i>	<i>використання</i>
<i>achievement</i>	<i>досягнення</i>
<i>science</i>	<i>наука</i>
<i>engineering</i>	<i>техніка</i>
<i>designer</i>	<i>конструктор</i>
<i>expert</i>	<i>спеціаліст, експерт</i>
<i>research</i>	<i>дослідження</i>
<i>re-armament</i>	<i>переозброєння</i>
<i>large-scale</i>	<i>широкомасштабний</i>
<i>variety</i>	<i>різновид, сорт</i>
<i>produce</i>	<i>продукція</i>
<i>provide</i>	<i>забезпечувати; передбачати</i>
<i>solution</i>	<i>рішення</i>
<i>success</i>	<i>успіх</i>
<i>to solve</i>	<i>вирішувати</i>
<i>breeding center</i>	<i>центр розведення</i>
<i>selective</i>	<i>селекційний</i>
<i>seed production</i>	<i>виробництво зерна</i>
<i>maneuverability</i>	<i>маневреність</i>
<i>production</i>	<i>виробництво</i>

Вправа 1

Знайдіть в тексті еквіваленти слів та словосполучень

Технічний прогрес, розвиток і удосконалення сільського господарства, широке застосування вискоєфективних знарядь, прогресивна технологія, наукове обґрунтування управління, нові різновиди сільськогосподарських культур, конструктори сільськогосподарської техніки, технічне переозброєння галузі, широкомасштабна механізація, автоматизація сільськогосподарських операцій, наукове вирішення проблеми.

Вправа 2

Перекладіть словосполучення українською мовою

Scientific progress, means of production, productive force, soil scientists, livestock experts, to achieve important results, practical application, the acreage of trial plots, plant breeders, selective-breeding and seed production machines, the growth of agricultural produce, farm machinery development.

Вправа 3

Закінчіть речення

1. Mechanization provides ...
2. Much depends upon the introduction of... into the plant growing.
3. Science becomes a ... force.
4. ... occupies the most important place among the factors of scientific and technological revolution in agriculture.

Вправа 4

Відкоригуйте твердження

1. Science does not become a productive force in agriculture.
2. Geneticists do not take part in research work in agriculture.
3. The greatest problem in the years to come is to enlarge the quality of agricultural machinery.
4. Plant growing does not need research work.

Вправа 5

Дайте відповіді на запитання

1. What does scientific and technological progress mean?
2. What becomes a productive force?
3. Who has already done a great deal of research?
4. What are the main roads of scientific and technological revolution in agriculture?
5. What does mechanization provide?
6. What is the greatest problem in the forthcoming years?
7. Why is the introduction of research into the plant growing so important?
8. What are the features of all selective-breeding and seed production machines?

Вправа 6

Перекладіть речення українською мовою

1. The scientific and technological progress means the development and improvement of agriculture on the basis of wide application of highly effective implements and other means of production, the progressive technology and science-based management with the use of modern achievements of science and engineering, the cultural and technical rise of the people in agriculture.
2. Among these factors mechanization occupies the most important place, providing the basis for the growth of agricultural produce.
3. Another problem is an increase in the production of grain.
4. Much of the success in solving the tasks facing the farmer comes from the introduction of research into the plant growing.
5. To make the work of plant breeders more productive steps are to be taken to mechanize all laboratory and field jobs in selective-breeding centers.
6. The practical application of new scientific ideas is today as important as their development.

Topic 5

IMPROVED TECHNOLOGY

For thousands of years, agricultural development was very slow. One of the



earliest agricultural tools was fire. Native Americans used fire to control the growth of berry-producing plants, which they knew grew quickly after a wildfire. Farmers cultivated small plots of land by hand, using axes to clear away trees and digging sticks to break up and till the soil. Over time, improved farming tools of bone, stone, bronze, and iron were

developed. New methods of storage evolved. People began stockpiling foods in jars and clay-lined pits for use in times of scarcity. They also began making clay pots and other vessels for carrying and cooking food.

Around 5500 BCE, farmers in Mesopotamia developed simple irrigation systems. By channeling water from streams onto their fields, farmers were able to settle in areas once thought to be unsuited to agriculture. In Mesopotamia, and later in Egypt and China, people organized themselves and worked together to build and maintain better irrigation systems.

Early farmers also developed improved varieties of plants. For example, around 6000 BCE, a new variety of wheat arose in South Asia and Egypt. It was stronger than previous cereal grains; its hulls were easier to remove and it could be made into bread.

As the Romans expanded their empire, they adapted the best agricultural methods of the people they conquered. They wrote manuals about the farming techniques they observed in Africa and Asia, and adapted them to land in Europe.



The Chinese also adapted farming tools and methods from nearby empires. A variety of rice from Vietnam ripened quickly and allowed farmers to harvest several crops during a single growing season. This rice quickly became popular throughout China.

Many medieval European farmers used an open-field system of planting. One field would be planted in spring, another in autumn, and one would be left unplanted, or fallow. This system preserved nutrients in the soil, increasing crop production.

The leaders of the Islamic Golden Age (which reached its height around 1000) in North Africa and the Middle East made agriculture into a science. Islamic Golden Age farmers learned crop rotation.

In the 15th and 16th centuries, explorers introduced new varieties of plants and agricultural products into Europe. From Asia, they carried home coffee, tea, and indigo, a plant used to make blue dye. From the Americas, they took plants such as potatoes, tomatoes, corn (maize), beans, peanuts, and tobacco. Some of these became staples and expanded people's diets.

Словник-мінімум:

<i>tool</i>	<i>знаряддя</i>
<i>native</i>	<i>корінний</i>
<i>berry-producing plants</i>	<i>ягідні рослини</i>
<i>wildfire</i>	<i>дикий вогонь</i>
<i>plot</i>	<i>ділянка землі</i>
<i>axe</i>	<i>сокира</i>
<i>digging stick</i>	<i>палиця-копачка</i>
<i>till</i>	<i>обробляти</i>
<i>storage</i>	<i>зберігання</i>
<i>evolve</i>	<i>розвиватися</i>
<i>stockpiling</i>	<i>накопичення</i>
<i>jar</i>	<i>глек, глечик</i>
<i>pit</i>	<i>яма, заглиблення</i>
<i>vessel</i>	<i>посудина</i>
<i>irrigation system</i>	<i>система зрошення</i>
<i>hull</i>	<i>лушпиння</i>
<i>expand</i>	<i>розширювати</i>
<i>conquer</i>	<i>завойовувати, підкоряти</i>
<i>manual</i>	<i>посібник</i>
<i>nearby</i>	<i>неподалік</i>
<i>ripen</i>	<i>дозрівати</i>
<i>open-field system</i>	<i>система відкритих полів</i>
<i>fallow</i>	<i>земля під паром</i>
<i>indigo</i>	<i>індиго</i>
<i>blue dye</i>	<i>синя фарба</i>
<i>bean</i>	<i>біб</i>
<i>peanut</i>	<i>арахіс</i>
<i>tobacco</i>	<i>тютюн</i>
<i>staple</i>	<i>основний продукт</i>

Вправа 1

Знайдіть у тексті еквіваленти слів та словосполучень

Протягом тисяч років, розвиток сільського господарства, сільськогосподарські знаряддя, дикий вогонь, обробляти невеликі ділянки землі, палиця-копачка, вдосконалення сільськогосподарських знарядь, методи зберігання, накопичення продуктів їжі, системи зрошування, непридатні площі для сільськогосподарської діяльності, вдосконалені види рослин, новий вид пшениці, хлібні злаки, різні види рису, збирати врожай, сезон дозрівання, система відкритих полів, не засаджений, поживні речовини у ґрунтах, збільшення виробництва, сівозміни, дослідники, основний продукт.

Вправа 2

Закінчіть речення

1. Native Americans used fire to control
2. Farmers cultivated small plots of land by hand, using axes
3. People began stockpiling foods in jars and
4. By channeling water from streams onto their fields, farmers were able to....
5. Early farmers also developed ...
6. It was stronger than previous cereal grains; its hulls were easier to remove and
7. They wrote manuals about the farming techniques they observed in
8. A variety of rice from Vietnam ripened quickly and allowed farmers to harvest several crops during
9. This system preserved nutrients in the soil, increasing
10. In the 15th and 16th centuries, explorers introduced new varieties of plants and agricultural products

Вправа 3

Перекладіть словосполучення українською мовою

Earliest agricultural tools, to control the growth, berry-producing plants, small plots of land, to clear away trees, to till the soil, new methods of storage, clay pots, carrying and cooking food, simple irrigation systems, from streams onto the fields, to build and maintain better irrigation systems, varieties of plants, easier to remove, to adapt the past agricultural methods, manuals about the farming technics, to harvest several crops, crop production, crop rotation, potatoes, tomatoes, corn, beans, to expand people's diets,

Вправа 4

Заповніть пропуски необхідними словами із тексту

1. For thousands of years, agricultural ... was very slow.
2. One of the earliest agricultural tools was
3. Over time, improved farming tools of ..., ..., ..., and ... were developed.
4. They also began making clay pots and other vessels for ... and ... food.
5. Around 5500 BCE, farmers in Mesopotamia developed simple
6. In Mesopotamia, and later in Egypt and China, people ... themselves and ... together to build and maintain better irrigation systems.
7. For example, around 6000 BCE, a new variety of ... arose in South Asia and Egypt.
8. As the Romans expanded their empire, they adapted the best ... of the people they conquered.
9. The Chinese also ... farming ... and ... from nearby empires.
10. This rice quickly became ... throughout China.
11. The leaders of the Islamic Golden Age (which reached its height around 1000) in North Africa and the Middle East made agriculture into a ...
12. From the Americas, they took plants such as ..., ..., ..., ..., and

Вправа 5

Дайте відповіді на запитання

1. What was the earliest agricultural tool?
2. How did native American farmers cultivate small plots of land?
3. What did they use?
4. What was developed over a time?
5. Where did people begin food stockpiling?
6. Who did develop simple irrigation systems?
7. How did this systems work?
8. When was a new variety of wheat developed?
9. Who had adapted the best agricultural methods?
10. What did allow farmers to harvest several crops?
11. Who did use an open-field system of planting?
12. How did it work?
13. When did farmers learn crop rotation?
14. What did explorers introduce in the 15th and the 16th centuries?

Вправа 6

З'єднайте термін і його переклад

- 1) berry-producing plants
- 2) development
- 3) cultivation
- 4) ripen
- 5) staple
- 6) pit
- 7) tool
- 8) storage

- a) обробіток
- b) яма, заглиблення
- c) дозрівати
- d) ягідні рослини
- e) основний продукт
- f) знаряддя
- g) розвиток
- h) зберігання

Вправа 7

Знайдіть визначення слів

1) wildfire	a) a plant whose yellowish-brown grain is used for making flour, or the grain itself
2) crop	b) the material on the surface of the ground in which plants grow
3) plant	c) any cultivated plant that is harvested for food, clothing, livestock fodder, biofuel, medicine, or other uses.
4) soil	d) a particular way of doing something
5) tool	e) something that people and animals eat, or plants absorb, to keep them alive
6) method	f) a basic food, or a main product or material
7) farm	g) A living thing that grows in earth, in water, or on other plants, usually has a stem, leaves, roots, and flowers, and produces seeds.
8) wheat	h) an area of land, together with a house and buildings, used for growing crops and/or keeping animals as a business
9) food	i) a fire that is burning strongly and out of control on an area of grass or bushes in the countryside
10) staple	j) a piece of equipment that you use with your hands to make or repair something

Вправа 8

Відкоригуйте твердження

1. For thousands of years, agricultural development was very quick.
2. Farmers cultivated large plots of land by hand, using axes to clear away trees and digging sticks to break up and till the soil.
3. Around 5500 BCE, farmers in Mesopotamia developed new varieties of plants.
4. This turnip quickly became popular throughout China.

Topic 6

MACHINERY

A period of important agricultural development began in the early 1700s for Great Britain and the Low Countries (Belgium, Luxembourg, and the Netherlands, which lie below sea level). New agricultural inventions dramatically increased food production in Europe and European colonies, particularly the United States and Canada.



One of the most important of these developments was an improved horse-drawn seed drill invented by Jethro Tull in England. Until that time, farmers sowed seeds by hand. Tull's drill made rows of holes for the seeds. By the end of the 18th century, seed drilling was widely practiced in Europe.

Many machines were developed in the United States. The cotton gin, invented by Eli Whitney in 1794, reduced the time needed to separate cotton fiber from seed. In the 1830s, Cyrus McCormick's mechanical reaper helped modernize the grain-cutting process. At about the same time, John and Hiram Pitts introduced a horse-powered thresher that shortened the process of separating grain and seed from chaff and straw. John Deere's steel plow, introduced in 1837, made it possible to work the tough prairie soil with much less horsepower. Along with new machines, there were several important advances in farming methods. By selectively breeding animals (breeding those with desirable traits), farmers increased the size and productivity of their livestock.

Cultures have been breeding animals for centuries – evidence suggests Mongolian nomads were selectively breeding horses in the Bronze Age. Europeans



began to practice selective breeding on a large scale beginning in the 18th century. An early example of this is the Leicester sheep, an animal selectively bred in England for its quality meat and long, coarse wool.

Plants could also be selectively bred for certain qualities. In 1866, Gregor Mendel's studies in heredity were published in Austria. In experiments with pea plants, Mendel

learned how traits were passed from one generation to the next. His work paved the way for improving crops through genetics.

New crop rotation methods also evolved during this time. Many of these were adopted over the next century or so throughout Europe. For example, the Norfolk four-field system, developed in England, proved quite successful. It involved the yearly rotation of several crops, including wheat, turnips, barley, clover, and ryegrass. This added nutrients to the soil, enabling farmers to grow enough to sell some of their harvest without having to leave any land unplanted.

Most of the world was not affected by these developments, however. Farmers in Asia, Australia, Africa, and South America continued to use old ways of agriculture.

Словник-мінімум:

<i>sea level</i>	<i>рівень моря</i>
<i>invention</i>	<i>винахід</i>
<i>particularly</i>	<i>особливо</i>
<i>drill</i>	<i>сівалка</i>
<i>sow</i>	<i>сіяти, засівати</i>
<i>row</i>	<i>ряд, міжряддя; борозна</i>
<i>cotton gin</i>	<i>бавовноочисна машина</i>
<i>cotton fiber</i>	<i>волокно бавовни</i>
<i>reaper</i>	<i>жниварка</i>
<i>thresher</i>	<i>молотарка</i>
<i>chaff</i>	<i>полова</i>
<i>straw</i>	<i>солома</i>
<i>plow</i>	<i>плуг</i>
<i>prairie</i>	<i>прерія</i>
<i>trait</i>	<i>характерна риса, особливість</i>
<i>evidence</i>	<i>свідчення</i>
<i>nomad</i>	<i>кочівник</i>
<i>selective breeding</i>	<i>селекційне розведення тварин</i>
<i>coarse wool</i>	<i>груба шерсть</i>
<i>heredity</i>	<i>спадковість; успадковані риси</i>
<i>pea</i>	<i>горох</i>
<i>clover</i>	<i>конюшина</i>
<i>ryegrass</i>	<i>райграс багаторічний англійський або пасовищний</i>

Вправа 1

Дайте відповіді на запитання

1. What did in the early 1700s years begin for Great Britain and the Low Countries?
2. How did new agricultural inventions affect on food production?
3. What was the most important development?
4. Who did horse-drawn seed drill invent?
5. What did these inventions do?
6. Where the cotton gin was invented?
7. What is the principle of the cotton gin?
8. What did John and Hiram Pitts introduce?
9. What was introduced in 1837 and why was it important?
10. What is selective breeding of animals?
11. What is the main value of the Leicester sheep?
12. What did Mendel learn about?
13. How did his work affect on agricultural science?
14. What does Norfolk four-field system involve?

Вправа 2

Перекладіть словосполучення українською мовою

Agricultural development, sea level, food production, improved horse-drawn seed drill, to sow seeds by hand, widely practiced in Europe, machines were developed, the cotton gin, reduce the time, to separate cotton fiber from seed, mechanical reaper, grain-cutting process, horse-powered thresher, chaff and straw, steel plow, several important advances, farming methods, selective breeding of animals, desirable traits, productivity of livestock, on a large scale, from one generation to the next, crop rotation methods, to grow enough, to use old ways of agriculture.

Вправа 3

Закінчіть речення

1. New agricultural inventions dramatically increased
2. Until that time, farmers sowed seeds by
3. The cotton gin, invented by Eli Whitney in 1794, reduced the time needed to
4. At about the same time, John and Hiram Pitts introduced a horse-powered thresher that shortened the process of

5. By selectively breeding animals (breeding those with desirable traits), farmers increased the size and
6. Cultures have been breeding animals for centuries – evidence suggests Mongolian nomads were selectively breeding
7. An early example of this is the Leicester sheep, an animal selectively bred in England for its quality
8. In experiments with pea plants, Mendel learned how traits were passed from... .
9. Many of these were adopted over the next century or
10. Most of the world was not affected by these
11. Farmers in Asia, Australia, Africa, and South America continued to

Вправа 4

Знайдіть у тексті еквіваленти слів та словосполучень

Період розвитку сільського господарства, нові винаходи, європейські колонії, один з найважливіших винаходів, сівалка, до того часу, багато сільськогосподарської техніки, зменшувати витрати часу, відділяти волокно бавовни від зерна, механічна жнивварка, модернізувати процес збору врожаю, землі-прерії, декілька важливих переваг, селекційне розведення тварин, збільшувати розміри, протягом століть, найперший приклад цього, за певними ознаками, дослідження про спадковість, нові методи сівозмін, виявитися досить успішним, декілька сільськогосподарських культур, залишати землі не засадженими.

Вправа 5

Заповніть пропуски необхідними словами із тексту

1. A period of important ... began in the early 1700s for Great Britain and the Low Countries (Belgium, Luxembourg, and the Netherlands, which lie below sea level).
2. One of the most important of these developments was an improved drill invented by Jethro Tull in England.
3. By the end of the 18th century, seed drilling was widely ... in Europe.
4. Many machines were developed in
5. In the 1830s, Cyrus McCormick's ... helped modernize the grain-cutting process.
6. John Deere's steel plow, introduced in 1837, made it possible to work the tough ... with much less horsepower.
7. Along with new machines, there were several important advances in

8. Europeans began to practice ... on a large scale beginning in the 18th century.
9. In 1866, Gregor Mendel's studies in ... were published in Austria.
10. His work paved the way for improving crops through
11. It involved the yearly rotation of several crops, including ..., turnips, barley, clover, and
12. Farmers in Asia, Australia, Africa, and South America continued to use ... ways of agriculture.

Вправа 6

Знайдіть переклад слів

- | | |
|----------------|---------------------------------|
| 1) successful | a) сівалка |
| 2) invention | b) молотарка |
| 3) drill | c) розвиток |
| 4) nutrients | d) плуг |
| 5) sow | e) свідчення |
| 6) development | f) характерна риса, особливість |
| 7) cotton gin | g) шерсть |
| 8) thresher | h) винахід |
| 9) reaper | i) ряд, міжряддя, борозна |
| 10) trait | j) сіяти, засівати |
| 11) plow | k) редька |
| 12) pea | l) успішний |
| 13) evidence | m) жниварка |
| 14) straw | n) конюшина |
| 15) wool | o) ячмінь |
| 16) clover | p) бавовноочисна машина |
| 17) row | q) горошок |
| 18) turnip | r) солома |
| 19) barley | s) урожай |
| 20) harvest | t) поживні речовини |

Вправа 7

Знайдіть відповідні означення слів у таблиці

- | | |
|--------------|---|
| 1) invention | a) the process in which someone or something grows or changes and becomes more advanced |
|--------------|---|

- | | |
|----------------|--|
| 2) production | b) the forward movement of something, or an improvement or development in something |
| 3) development | c) something that has never been made before, or the process of creating something that has never been made before |
| 4) seed | d) the study of how, in all living things, the characteristics and qualities of parents are given to their children by their genes |
| 5) advance | e) how good or bad something is |
| 6) quality | f) the process of making or growing goods to be sold |
| 7) genetics | g) a small, round, or oval object produced by a plant and from which, when it is planted, a new plant can grow |

Вправа 8

Перекладіть речення українською мовою:

1. New agricultural inventions dramatically increased food production in Europe and European colonies, particularly the United States and Canada.
2. Until that time, farmers sowed seeds by hand. Tull's drill made rows of holes for the seeds. By the end of the 18th century, seed drilling was widely practiced in Europe.
3. The cotton gin, invented by Eli Whitney in 1794, reduced the time needed to separate cotton fiber from seed.
4. Along with new machines, there were several important advances in farming methods.
5. By selectively breeding animals (breeding those with desirable traits), farmers increased the size and productivity of their livestock.
6. An early example of this is the Leicester sheep, an animal selectively bred in England for its quality meat and long, coarse wool.
7. In experiments with pea plants, Mendel learned how traits were passed from one generation to the next.
8. It involved the yearly rotation of several crops, including wheat, turnips, barley, clover, and ryegrass.

This added nutrients to the soil, enabling farmers to grow enough to sell some of their harvest without having to leave any land unplanted.

Topic 7

METHODS OF CULTIVATION

Agricultural methods often vary widely around the world, depending on climate, terrain, traditions, and available technology.

Low-technology farming involves permanent crops: food grown on land that is not replanted after each harvest. Citrus trees and coffee plants are examples of permanent crops. Higher-technology farming involves crop rotation, which requires knowledge of farmable land. Scholars and engineers not only use crop rotation and irrigation, but plant crops according to the season, type of soil, and amount of water needed.

Agricultural methods used in the Corn Belt of the U.S. are very different. The Corn Belt is the area of the northern Midwest where most of the nation's corn crop is grown. First of all, farmers rarely work alone – the size of American farms requires a lot of labor. Soon after they harvest the corn in autumn, farmers work leftover vegetation, or stubble, into the soil. In the spring, farmers work the soil again, using an implement with rows of sharp-edged steel discs, called a disc harrow. The discs cut into the soil, breaking it into smaller pieces and supplying it with air.



Next, a tractor-pulled planter sows rows of seed. The machine makes furrows in the soil, drops in kernels of high-yield, genetically modified corn, and covers them with dirt. After the corn seeds have sprouted, another machine injects liquid fertilizer into the ground.

The farmers then use chemicals to control weeds and pests, and loosen the soil with a tractor-pulled cultivator during the harvesting season.

U.S. industrial farmers may plant a thousand acres of just corn. The practice of specializing in a single crop is known as monoculture. To harvest the crop, farmers use a mechanical harvester that picks the ears of corn and shells them into a bin.

Little of the corn grown in the Corn Belt is for human consumption. Most of the corn grown in the U.S. is for cattle feed and industrial uses, such as corn syrup sweeteners.

From alpacas in Peru to zebus in India, billions of domesticated animals around the world are raised and cared for in a variety of ways. In many countries, domesticated animals are an important source of food.

In Nigeria, for example, the Fulani people have long been nomads. They move with their cattle herds from one grazing area to another. The cattle feed on scrub and grasses in land unsuitable for farming. The Fulani rely on cattle for milk, but rarely slaughter their animals for meat.

Throughout the U.S., beef cattle are bred to grow quickly and yield large quantities of fatty meat. When they are five to 12 months old, the animals are shipped to feedlots. There, they are kept in pens and fed grain and vitamin supplements until they reach market size. Then they are slaughtered.

The two ways of raising livestock are confronting each other in the developing world. In Uganda, Ankole cattle have been bred to withstand the harsh climate of Central Africa—their long, curved horns help distribute heat and their digestive systems have adapted to poor nutrition and little water. However, the market for milk has driven many Ugandan farmers to import Holstein cattle. Holsteins are native to Northern Europe. Keeping them healthy in an equatorial region requires a high amount of antibiotics, vaccines, and other chemicals. The Ankole, which produce little milk and leaner meat, may be extinct within the century.

Many farmers throughout the world practice free-range poultry farming. The birds forage for food in farms or community yards, eating whatever they find: seeds, insects, household scraps, and surplus grain.

In many developed countries, poultry production has become a major agricultural industry. Birds are given the same sort of vaccines and hormones used for cattle. Chickens are bred for either eggs or meat. One poultry house may contain more than a million birds. Often, machines automatically provide feed and water, collect the eggs, and remove waste.

Словник-мінімум:

terrain

permanent crops

labor

leftover vegetation

stubble

disc harrow

furrow

kernel

місцевість

постійні зернові культури

праця, робоча сила

залишки рослинності

стерня

дисковий культиватор

борозна

зерно, ядро

<i>sprout</i>	<i>проростати, пускати паростки</i>
<i>bin</i>	<i>бункер (комбайна)</i>
<i>consumption</i>	<i>споживання</i>
<i>corn syrup sweeteners</i>	<i>кукурудзяний сироп-підсолоджувач</i>
<i>slaughter</i>	<i>забій (худоби)</i>
<i>fatty meat</i>	<i>жирне м'ясо</i>
<i>ship</i>	<i>переміщатися, транспортуватися</i>
<i>feedlots</i>	<i>загоні</i>
<i>pen</i>	<i>загін, обгороджене місце</i>
<i>withstand</i>	<i>витримувати</i>
<i>harsh climate</i>	<i>суворий клімат</i>
<i>digestive system</i>	<i>травна система</i>
<i>lean meat</i>	<i>пісне м'ясо</i>
<i>birds forage</i>	<i>корм для птиці</i>
<i>household scraps</i>	<i>побутові відходи</i>
<i>surplus grain</i>	<i>профіцит зерна</i>

Вправа 1

Дайте відповіді на запитання

1. On what do agricultural methods depend?
2. On what does low-technology farming involve?
3. What are the examples of permanent crops?
4. What do farmers do after they harvest the corn in autumn?
5. What is a disk harrow?
6. What is its principle?
7. Why do farmers use chemicals?
8. What is monoculture?
9. What for is most of the corn grown in the U.S.?
10. When is beef cattle slaughtered?
11. What does Ankole produce?
12. What is the principle of the free-range poultry farming?
13. What is a major agriculture industry in many developed countries?

Вправа 2

Заповніть пропуски відповідними словами з тексту

1. Agricultural methods often vary widely around the world, depending on
..., ..., ..., and
2. and are examples of permanent crops.

3. ... and ... not only use ... and ..., but plant crops according to the season, type of soil, and amount of water needed.
4. The machine makes ... in the soil, drops in ... of high-yield, ... corn, and covers them with dirt.
5. The farmers then use chemicals to control ... and .., and ... with a tractor-pulled ... during the harvesting season.
6. Most of the corn grown in the U.S. is for ... and ... , such as ...
7. ... , for example, the ... people have long been
8. ... on ... and ... in land unsuitable for farming.
9. ... , Ankole cattle have been ... to ... climate of Central Africa – their long, curved horns help distribute ... and their ... have adapted to poor ... and
10. ... throughout the world ...

Вправа 3

Перекладіть словосполучення українською мовою

Agricultural methods, available technology, permanent crops, higher-technology farming, knowledge of farmable land, scholars and engineers, type of soil, amount of water, a lot of labor, harvest the corn, sharp-edged steel disc, break into small pieces, make furrows in the soil, genetically modified corn, liquid fertilizer, to control weeds and pests, loosen the soil, harvesting season, use a mechanical harvester, human consumption, domesticated animals, a variety of ways, source of food, scrub and grasses, unsuitable for farming, slaughter animals, to grow quickly, large quantities, vitamin supplements, withstand the harsh climate, poor nutrition, a high amount of antibiotics, extinct within the century, free-range poultry farming, a major agricultural industry, remove waste.

Вправа 4

З'єднайте частини речень опираючись на текст

- | | |
|---|---|
| 1. Higher-technology farming involves crop rotation, ... | a) that picks the ears of corn and shells them into a bin.... |
| 2. First of all, farmers rarely work alone ... | b) – the size of American farms requires a lot of labor.... |
| 3. The farmers then use chemicals to control weeds and pests, ... | c) ...industrial uses, such as corn syrup sweeteners. |
| 4. To harvest the crop, farmers use | d) ... which requires knowledge of |

a mechanical harvester ..

5. Most of the corn grown in the U.S. is for cattle feed and ..

6. In Uganda, Ankole cattle have been bred to withstand the harsh climate..

7. Birds are given the same sort of vaccines ,..

farmable land.

e) ...of Central Africa—their long, curved horns help distribute heat and their digestive systems have adapted to poor nutrition and little water.

f) ...and hormones used for cattle.

g) ... and loosen the soil with a tractor-pulled cultivator during the harvesting season.

Вправа 5

Визначте, чи вірне твердження

1. Citrus trees and coffee plants are examples of permanent crops.
2. In the autumn, farmers work the soil again, using an implement with rows of sharp-edged steel discs, called a disc harrow.
3. The practice of specializing in many crops is known as monoculture.
4. From alpacas in Peru to zebus in India, billions of domesticated animals around the world are raised and cared for in a variety of ways.
5. Throughout the U.S., beef cattle are bred to grow quickly and yield large quantities of fatty meat.
6. Holsteins are not native to Northern Europe.
7. The Ankole, which produce little milk and leaner meat, may be extinct within the year.
8. Many farmers throughout the world practice free-range poultry farming.
9. One poultry house may contain only several birds.
10. Often, machines automatically provide feed and water, collect the eggs, and remove waste.

Вправа 6

Знайдіть у тексті еквіваленти слів і словосполучень

Залежно від клімату, наявні технології, приклади постійних зернових культур, сівозміни, зрошувальні системи, необхідна кількість води, перш за все, після збору урожаю, навесні, врзатися в землю, насичувати повітрям, закидувати зерно в ґрунт, зерна кукурудзи, машина вприскує добрива, тисячі акрів землі, для годівлі, різними шляхами, важливе джерело їжі, велика рогата худоба, вітамінні добавки, досягати товарно виду, суперечити одне

одному, травні системи, розподіляти тепло, давати мало молока, галузь сільського господарства, шкідники, забезпечувати годівлю.

Вправа 7

З'єднайте термін і його переклад

- | | |
|------------------------|------------------------------|
| 1) leftover vegetation | a) постійні зернові культури |
| 2) furrow | b) корм |
| 3) permanent crops | c) залишки рослинності |
| 4) slaughter | d) споживання |
| 5) forage | e) забій |
| 6) stubble | f) стерня |
| 7) consumption | g) побутові відходи |
| 8) household scraps | h) борозна |

Вправа 8

Знайдіть визначення слів

1) terrain	a) a machine for harvesting crops
2) harvest	b) an area of land, when considering its natural features
3) irrigation	c) the business or trade in a particular product, including financial products
4) harvester	d) the oval object with a hard shell that is produced by female birds, especially chickens, eaten as food
5) cattle	e) to supply land with water so that crops and plants will grow
6) market	f) the killing of animals for meat
7) antibiotic	g) a substance containing a virus or bacterium in a form that is not harmful, given to a person or animal to prevent them from getting the disease that the virus or bacterium causes
8) slaughter	h) cows and bulls that are kept for their milk or meat
9) egg	i) a medicine or chemical that can destroy harmful bacteria in the body or limit their growth
10) vaccine	j) the time of year when crops are

	cut and collected from the fields, or the activity of cutting and collecting them, or the crops that are cut and collected
--	--

Вправа 9

Перекладіть речення на українську мову

1. Agricultural methods often vary widely around the world, depending on climate, terrain, traditions, and available technology.
2. Citrus trees and coffee plants are examples of permanent crops.
3. Soon after they harvest the corn in autumn, farmers work leftover vegetation, or stubble, into the soil.
4. The discs cut into the soil, breaking it into smaller pieces and supplying it with air.
5. The machine makes furrows in the soil, drops in kernels of high-yield, genetically modified corn, and covers them with dirt.
6. After the corn seeds have sprouted, another machine injects liquid fertilizer into the ground.
7. To harvest the crop, farmers use a mechanical harvester that picks the ears of corn and shells them into a bin.
8. Most of the corn grown in the U.S. is for cattle feed and industrial uses, such as corn syrup sweeteners.
9. Throughout the U.S., beef cattle are bred to grow quickly and yield large quantities of fatty meat.
10. In Uganda, Ankole cattle have been bred to withstand the harsh climate of Central Africa—their long, curved horns help distribute heat and their digestive systems have adapted to poor nutrition and little water.
11. The birds forage for food in farms or community yards, eating whatever they find: seeds, insects, household scraps, and surplus grain.
12. Chickens are bred for either eggs or meat.
13. Birds are given the same sort of vaccines and hormones used for cattle.

Topic 8

NO-TILLAGE METHOD

Planting corn and other row crops directly into sod is new practice. More and more growers are using this easy and economical method of planting row crops.

The idea of planting row crops without plowing goes back to at least 1943. But no-tillage or zero-tillage remained largely experimental until several effective herbicides have been developed.



Crops are planted in unprepared soil in a narrow seed furrow opened with a coultter. Tilled area is only 2 or 3 inches wide. Using this tillage system one should be very careful in applying the proper amount of herbicides for weed control. They should include both a contact herbicide to kill early weeds or sod and a residual

herbicide. By combining a contact herbicide with a residual one to which corn has a high tolerance, nearly all vegetation present in cornfields before planting can be killed. The residual herbicide also controls weeds during the corn growing season, making cultivation unnecessary.

While spraying the sod one should use enough water with the herbicide to cover all the vegetation. As much as 150 gallons per acre may be needed in very heavy vegetative cover.

At present the scientists agree that zero-tillage is quite a promising method but it will never fit all farms and all conditions. It is not used on heavy or poorly drained soils, because these soils need aeration that is provided by plowing.



Advantages of no-tillage planting:

- no-tillage corn yields 20 per cent more than corn grown with conventional tillage;
- the crop residue and untreated upper soil layer reduce moisture loss;

- conventional moldboard ploughing - especially spring ploughing – cannot often be done early enough because of weather or soil conditions;
- due to early planting it is possible to practice double-cropping;
- the presence of crop residue on the soil surface protects the soil from wind and water erosion;
- corn is very cheap to grow with zero-tillage method;
- no-tillage planting also provides a better footing for heavy harvest machines if there is much rain at the time of harvest.

Словник-мінімум

<i>corn</i>	<i>кукурудза</i>
<i>row crops</i>	<i>просапні культури</i>
<i>sod</i>	<i>дерен</i>
<i>zero-tillage</i>	<i>нульовий обробіток</i>
<i>no-tillage</i>	
<i>furrow</i>	<i>борозна</i>
<i>seed</i>	<i>насіння, зерно</i>
<i>coulter</i>	<i>ніж плуга, різак</i>
<i>to till</i>	<i>орати, обробляти землю</i>
<i>weed</i>	<i>бур'ян</i>
<i>residual</i>	<i>залишковий</i>
<i>tolerance</i>	<i>стійкість, витривалість</i>
<i>cornfield</i>	<i>поле, нива</i>
<i>to spray</i>	<i>розпилювати, оббризкувати</i>
<i>vegetation</i>	<i>рослинність</i>
<i>tillage</i>	<i>оранка, розпушування, обробіток ґрунту</i>
<i>crop residue</i>	<i>пожнивні рештки</i>
<i>moisture loss</i>	<i>втрата вологи</i>
<i>trip</i>	<i>пробіг (машини по полю)</i>
<i>moldboard</i>	<i>відвал плуга</i>
<i>double-cropping</i>	<i>збирання подвійного врожаю</i>
<i>erosion</i>	<i>ерозія</i>
<i>fuel</i>	<i>пальне</i>
<i>footing</i>	<i>опора, основа</i>
<i>vegetative</i>	<i>рослинний, вегетативний</i>

Вправа 1

Знайдіть в тексті еквіваленти словосполучень:

Просапні культури, ефективні гербіциди, система обробітку, відповідна кількість гербіцидів, період росту зернових культур, перспективний метод, забезпечується оранкою, відвальний обробіток ґрунту, весняна оранка, пожнивні рештки, краща опора для важких комбайнів.

Вправа 2

Перекладіть словосполучення українською мовою:

Planting corn, unprepared soil, narrow seed furrow, contact herbicide, residual herbicide, a high tolerance, the corn growing season, while spraying the sod, heavy vegetative cover, heavy or poorly drained soils, untreated upper soil layer, reduce moisture loss.

Вправа 3

Відкоригуйте твердження:

1. Planting crops directly into sod is a very old practice.
2. Effective herbicides are not needed when no-tillage method is used.
3. The use of residual herbicide makes cultivation absolutely necessary.
4. Spraying the sod you need 50 gallons of water per acre if no-tillage method is practiced.
5. Untreated upper soil layer enlarges moisture loss.

Вправа 4

Закінчіть переклад речень:

1. Aeration is provided by (оранкою).
2. The crop residue and untreated upper soil layer reduce (втрату вологи).
3. No-tillage method makes possible double-cropping due to (ранній сівбі).
4. The farmer must be careful in applying the proper amount of herbicides for (боротьби з бур'янами).

Вправа 5

Дайте відповіді на запитання:

1. What easy and economical method of planting do you know?
2. When did the idea of planting row crops without ploughing appear?
3. What is tilled area when no-tillage method is used?
4. What herbicides are used?
5. What quality of water is needed while spraying the sod?

6. In what cases cannot no-tillage method be used?
7. Why isn't it used on heavy or poorly drained soils?
8. What advantages of no-tillage planting do you know?
9. Why is it possible to practice double-cropping if no-tillage method is used"
10. What is the significance of crop residue on the soil surface?

Topic 9

GRAIN

Grain is the harvested seed of grasses such as wheat, oats, rice, and corn. Other important grains include sorghum, millet, rye, and barley. Around the globe, grains, also called cereals, are the most important staple food. Humans get an average of 48 percent of their calories, or food energy, from grains. Grains are also used to feed livestock and to manufacture some cooking oils, fuels, cosmetics, and alcohols.



Almost half of the grains grown around the world are harvested for people to eat directly. People turn wheat flour into bread, steam rice, and make corn tortillas. Grains are a food staple in almost every culture on Earth. A food staple is food that is eaten frequently, often at every meal. Staple foods can be eaten fresh or stored for use all year. Rice, corn, and wheat are the most common staple foods on Earth.

Grains are so important because they are a good source of important nutrients called carbohydrates. Carbohydrates are a type of sugar that provides energy for organisms to function. Grains have carbohydrates as well as other important nutrients, such as vitamins. While grains fill many nutritional needs, they often lack some important proteins. In many cultures, grains are part of a staple diet when combined with protein-rich legumes, such as beans. Together, grains and legumes make a healthy diet: corn and beans, rice and tofu, wheat bread and peanut butter.

A third of the world's grain supply is fed to animals. Most domestic animals, from cattle to dogs, are fed food rich in grains and grain products.

The rest of the world's grain supply is used in the manufacture of industrial products. Biodiesel is a fuel used for vehicles. One type of biodiesel is ethanol, which can be made from corn.

Grains are annual plants. This means they have only one growing season per year, yielding one crop. Every growing season, grasses grow, reach maturity, produce seeds, and then die. Grains are harvested from dead, or dry, grasses.

Some grains are winter grains, such as rye. They are able to withstand cold, wet climates. Others are summer grains, such as corn. Corn usually grows best in warm weather.

Grains can grow in almost any climate. Rice is the most important grain in many tropical areas, where it is hot and humid year-round. Rice is especially

common in Asia. In Southeast Asia, rice is grown and harvested in flooded fields called paddies. Rice paddies can be flat or terraced. Terraced rice paddies look like steps on a green hill. This type of grain agriculture has been used for centuries.



Unlike rice, sorghum does not grow well in a wet climate. Sorghum favors an arid climate. The nations of West Africa, including Senegal, the Gambia, Burkina Faso, and Cape Verde, are the world's largest producers of sorghum.

In temperate areas – those with warm summers and cold winters – wheat is the most common grain. Wheat fields are common in the Great Plains of the United States and Canada, for instance. Corn, which is native to the Americas, is now grown in many temperate areas throughout the world. Oats, another grain that grows in temperate areas, are also used as a livestock feed.

Словник-мінімум

grain

sorghum

food energy

fuel

flour

steam rice

frequently

meal

lack

legumes

wheat bread

peanut

vehicle

annual plant

maturity

humid

paddies

arid climate

зернові культури

сорго

поживна цінність

паливо

мука

пропарений рис

часто

трапеза

нестача

бобові

пшеничний хліб

арахіс

транспортний засіб

однорічна рослина

стиглість, повний розвиток

вологий

плантації

посушливий клімат

Вправа 1

Перекладіть слова і словосполучення українською мовою

Harvested seed, important grains, staple food, manufacture some cooking oils, turn wheat flour into bread, nutrients, provide energy for organisms nutritional needs, lack some important proteins, protein-rich legumes, domestic animals, industrial products, annual plants, growing season, reach maturity, produce seeds, winter grains, withstand cold, wet climates, flooded fields, rice paddies, arid climate.

Вправа 2

Знайдіть переклад до слів

- | | |
|-----------------|----------------------|
| 1) sorghum | a) однорічна рослина |
| 2) annual plant | b) посушливий клімат |
| 3) food energy | c) пшеничний хліб |
| 4) arid climate | d) сорго |
| 5) wheat bread | e) повний розвиток |
| 6) legumes | f) бобові |
| 7) maturity | g) зернові культури |
| 8) grain | h) поживна цінність |

Вправа 3

Закінчіть переклад речень

1. Grain is the harvested seed of grasses such as wheat, oats, rice, and (кукурудза).
2. Around the globe, grains, also called cereals, are the most important (основний продукт харчування).
3. Grains have carbohydrates as well as other important nutrients, such as (вітаміни).
4. In many cultures, grains are part of a staple diet when combined with protein-rich legumes, such as (боби).
5. The rest of the world's grain supply is used in the manufacture of (технічних культур).
6. In Southeast Asia, rice is grown and harvested in flooded fields called (плантації).

Вправа 4

Дайте відповіді на запитання

1. What is grain?

2. How do people also call grains?
3. What is staple food?
4. What do people get from grains?
5. How do they also use it?
6. How can be staple foods eaten?
7. What are carbohydrates?
8. What are grains often lack of?
9. What does make a helthy diet?
- 10.What is biodiesel?
- 11.What is ethanol made from?
- 12.Which type of plants are grains: annual or summer?
- 13.Which type of grains is rye?
- 14.How are flooded fields called?
- 15.Where does sorghum grow?

Вправа 5

Відкоригуйте твердження

1. Grain is the harvested seed of trees such as wheat, oats, rice, and corn.
2. Humans get an average of 48 percent of their fat, or food energy, from grains.
3. People turn oats flour into bread, steam rice, and make corn tortillas.
4. A food staple is food that is eaten rarely.
5. Carbohydrates are a type of fat that provides energy for organisms to function.
6. Grains have carbohydrates as well as other important nutrients, such as sugar.
7. The rest of the world's grain supply is used in the manufacture of clothes.
8. Grains are winter plants.
9. Corn usually grows best in cold weather.
- 10.In Southeast Asia, rice is grown and harvested in flooded fields called meadow.
- 11.Corn, which is native to the Americas, is now grown in many west areas throughout the world.

Вправа 6

З'єднайте термін і його визначення

Legumes a plant that has its seeds in a pod, such as the bean or pea

Grain a seed or seeds from a plant, especially a plant like a grass such as

	rice or wheat
Humid	(of air and weather conditions) containing extremely small drops of water in the air
Maturity	the state of being completely grown physically
Peanut	an oval-shaped nut that grows underground in pairs inside a thin brown shell
Rice	the small seeds of a particular type of grass, cooked, and eaten as food
Corn	(the seeds of) plants, such as wheat, maize, oats, and barley, that can be used to produce flour
Tofu	a soft, pale food that has very little flavour but is high in protein, made from the seed of the soya plant
Grass	a low, green plant that grows naturally over a lot of the earth's surface, having groups of very thin leaves that grow close together in large numbers
Season	one of the four periods of the year; spring, summer, autumn, or winter
Paddies	A specially irrigated or flooded field where rice is grown

Вправа 7

Перекладіть речення на українську мову

1. Around the globe, grains, also called cereals, are the most important staple food.
2. Grains are also used to feed livestock and to manufacture some cooking oils, fuels, cosmetics, and alcohols.
3. A food staple is food that is eaten frequently, often at every meal.
4. Rice, corn, and wheat are the most common staple foods on Earth.
5. Grains have carbohydrates as well as other important nutrients, such as vitamins.
6. In many cultures, grains are part of a staple diet when combined with protein-rich legumes, such as beans.
7. Most domestic animals, from cattle to dogs, are fed food rich in grains and grain products.
8. One type of biodiesel is ethanol, which can be made from corn.
9. Every growing season, grasses grow, reach maturity, produce seeds, and then die.
10. They are able to withstand cold, wet climates.
11. Rice is the most important grain in many tropical areas, where it is hot and humid year-round.
12. Terraced rice paddies look like steps on a green hill.

13. Oats, another grain that grows in temperate areas, are also used as a livestock feed.

Вправа 8

Перекладіть уривок тексту на англійську мову

Зернове господарство спеціалізується на вирощуванні продовольчих хлібних культур - пшениці й жита; продовольчих круп'яних - гречки, проса, рису; фуражних (що використовуються як корм для тварин) - ячменю та вівса, кукурудзи; зернобобових - гороху, квасолі тощо.

Провідне місце у рослинництві займає вирощування зернових. Під зерновими культурами в Україні зайнято понад 57% посівних площ. Традиційно найважливішою зерною культурою в Україні є пшениця, особливо озима, яка на чорноземах дає добрі врожаї (у 2012 р. середня урожайність з гектара пшениці склала 28,5 ц/га, що є найвищим з показників за роки незалежності). Озиму пшеницю висівають восени, щоб використати осінню і весняну вологу в ґрунті. Вона займає третину всієї площі зернових. Вирощують озиму пшеницю переважно у степовій і лісостеповій зонах. Посіви ярої пшениці займають незначні площі у східних областях України, де клімат континентальніший і взимку випадає мало снігу, який не може захистити посіви від вимерзання. Загальний збір пшениці складає 21,5 млн. т.

Topic 10

HARVESTING GRAIN

People first began eating grains about 75,000 years ago in western Asia. These grains, including einkorn and emmer, were ancestors of today's wheat. Einkorn and emmer grew wild near the banks of rivers. People harvested the grasses that grew naturally near their communities.

People began cultivating, or growing, grain more recently. In 2009, scientists announced that they had discovered the world's oldest known grain silos at Dhra in what is now the nation of Jordan. The silos, which date back 11,000 years, contained remnants of barley and an early type of wheat.



Ancient people ate grains in much the same way we do today. Wheat grains were made into flour and used in breads. Rice was steamed and eaten hot or cold. Oats were mashed with water or milk to make oatmeal. Beer, one of the oldest manufactured beverages in the world, is made from grain such as barley. Ancient beers had a very low alcohol content, but were good sources of carbohydrates.

In some ancient civilizations, grain products served as wages or forms of currency. Many of the workers who built Egypt's pyramids at Giza, for instance, were often paid in bread and beer.

Today, grain silos are a familiar sight to many people in the developed world. Harvesting is done almost entirely with enormous, expensive machinery. The most important piece of agricultural machinery for grain crops is the combine harvester. This remarkable machine does three jobs: it cuts the grain, threshes the grain, and winnows the grain. Cutting, of course, is removing the grain from the stalk of grass. Threshing is loosening the edible grain from its casing, called the chaff. (Chaff is inedible; organisms cannot digest it.) Winnowing is the process of



removing the grain from the chaff. Combine harvesters help farmers expand the amount of grains they can harvest by combining three activities into one.

In the developing world, few farmers have the huge fields of grain that agribusinesses in the developed world do. Farmers in the developing

world typically have a few acres, and provide grain for their local community. These farmers usually thresh and winnow with separate machines (threshers and winnowers) after harvesting the field. In many places, harvesting is still done with hand tools such as the sickle, a long, curved blade used for cutting many stalks of grain at once.

Whole grains are cereals that have not been processed to remove their natural tissues: germ (the seed's embryo), endosperm (nutrition for the embryo), and bran (outer layer).

Словник-мінімум

<i>einkorn</i>	<i>однозернянка</i>
<i>emmer</i>	<i>еммер</i>
<i>ancestor</i>	<i>нащадок</i>
<i>grain silos</i>	<i>елеватори</i>
<i>remnants</i>	<i>рештки</i>
<i>mash</i>	<i>змішувати</i>
<i>beverage</i>	<i>напій</i>
<i>currency</i>	<i>валюта, грошовий обіг</i>
<i>combine harvester</i>	<i>комбайн</i>
<i>winnow</i>	<i>просівати</i>
<i>stalk</i>	<i>стебло, стержень</i>
<i>edible grain</i>	<i>їстівні зерна</i>
<i>sickle</i>	<i>серп</i>
<i>tissue</i>	<i>тканина</i>
<i>germ</i>	<i>ембріон (зав'язь)</i>
<i>endosperm</i>	<i>ендосперма</i>
<i>bran</i>	<i>висівки</i>

Вправа 1

Знайдіть еквіваленти слів і словосполучень у тексті

Зернові культури, на берегах річок, обробляти землі, нещодавно, науковці, містити рештки, давні люди, таким самим чином, як і сьогодні, змушувати з водою або молоком, найстаріший напій у світі, джерело вуглеводів, слугувати валютною одиницею, наприклад, вартісний, найважливіша частина, комбайн, просівати, відділяти стебло, їстівні зерна, об'єднувати у три дії, ручні знаряддя праці, перероблятися, природні тканини.

Вправа 2

Заповніть пропуски необхідними словами із тексту

1. These grains, including einkorn and emmer, were ... of today's wheat.
2. People began cultivating, or growing, ... more recently.
3. In 2009, scientists announced that they had discovered the world's oldest known ... at Dhra in what is now the nation of Jordan.
4. The silos, which date back 11,000 years, contained remnants of barley and an early type of ...
5. Wheat grains were made into flour and used in ...
6. Beer, one of the oldest manufactured beverages in the world, is made from grain such ...
7. In some ancient civilizations, grain products served as wages or forms of ...
8. The most important piece of agricultural ... for grain crops is the combine harvester.
9. This remarkable machine does three jobs: ... the grain, ... the grain, and ... the grain.
10. Winnowing is the process of removing the grain from the ...
11. In many places, harvesting is still done with hand tools such as the ..., a long, curved blade used for cutting many ... of grain at once.
12. Whole grains are cereals that have not been processed to remove their natural tissues: ... (the seed's embryo), ... (nutrition for the embryo), and ... (outer layer).

Вправа 3

Дайте відповіді на запитання

1. What was the ancestor of the today's wheat?
2. Where did it grow?
3. What did scientists discover in 2009?
4. What was the oldest manufactured beverage?
5. What was it made from?
6. For what grain products served in some ancient civilizations?
7. What is the most important piece of agricultural machinery?
8. What does it do?
9. What is the principle of winnowing process?
10. What kind of hand tools are still used for harvesting?

Вправа 4

Перекладіть слова і словосполучення українською мовою

Einkorn and emmer, grow wild, near the communities, scientists announced, contain remnants, early type of wheat, in match the same way, make into flour, hot or cold, mash with water or milk, is made from grain, a very low alcohol content, source of carbohydrates, ancient civilizations, grain products, form of currency, bred and bear, developed world, enormous machinery, combine harvester, thresh the grain, remove the grain from the stock, edible grain, digest, expand the amount of grains, huge fields, the seed's embryo, nutrition for the embryo, outer layer.

Вправа 5

З'єднайте частини речень опираючись на текст

- | | |
|---|---|
| 1. These grains, including einkorn and emmer ... | a) ... contained remnants of barley and an early type of wheat. |
| 2. People harvested the grasses ... | b) ... removing the grain from the stalk of grass. |
| 3. The silos, which date back 11,000 years, ... | c) ... from its casing, called the chaff. |
| 4. Ancient beers had a very low alcohol content ... | d) ... harvesting is still done with hand tools such as the sickle, a long, curved blade used for cutting many stalks of grain at once. |
| 5. Many of the workers who built Egypt's pyramids at Giza, for instance ... | e) ... were ancestors of today's wheat. |
| 6. Cutting, of course, is ... | f) ... by combining three activities into one. |
| 7. Threshing is loosening the edible grain ... | g) ... and provide grain for their local community. |
| 8. Combine harvesters help farmers expand the amount of grains they can harvest ... | h) ... but were good sources of carbohydrates. |
| 9. Farmers in the developing world typically have a few acres | i) ... were often paid in bread and beer |

- ...
10. These farmers usually thresh and winnow with separate machines (threshers and winnowers) after harvesting the field. In many places ...
- j) ... that grew naturally near their communities.

Вправа 6

Знайдіть переклад до слів

- | | |
|-----------------|------------------|
| 1) mash | a) висівки |
| 2) bran | b) просівати |
| 3) edible grain | c) тканина |
| 4) stock | d) їстівні зерна |
| 5) winnow | e) змішувати |
| 6) tissue | f) стебло |
| 7) provide | g) окремий |
| 8) separate | h) забезпечувати |

Вправа 7

Відкоригуйте твердження

1. People first began eating grains about 75,000 years ago in South America.
2. People harvested the grasses that blew naturally near their hands.
3. Modern people are eating grains in much the same way they do centuries ago.
4. Corn was made into beer and used in breads.
5. Vodka, one of the oldest manufactured beverages in the world, is made from grain such as barley.
6. Many of the workers who built Egypt's pyramids at Giza, for instance, were often paid in clothes.
7. Harvesting is done almost entirely with enormous, cheap manufacturing.
8. Farmers in the developing world typically have a vast fields, and provide grain for the whole world.

Вправа 8

Перекладіть речення українською мовою

1. Einkorn and emmer grew wild near the banks of rivers.
2. In 2009, scientists announced that they had discovered the world's oldest known grain silos at Dhra in what is now the nation of Jordan.

3. Wheat grains were made into flour and used in breads. Rice was steamed and eaten hot or cold.

4. In some ancient civilizations, grain products served as wages or forms of currency.

5. Harvesting is done almost entirely with enormous, expensive machinery.

6. Threshing is loosening the edible grain from its casing, called the chaff.

7. Winnowing is the process of removing the grain from the chaff.

8. These farmers usually thresh and winnow with separate machines (threshers and winnowers) after harvesting the field. In many places, harvesting is still done with hand tools such as the sickle, a long, curved blade used for cutting many stalks of grain at once.

9. Whole grains are cereals that have not been processed to remove their natural tissues: germ (the seed's embryo), endosperm (nutrition for the embryo), and bran (outer layer).

Topic 11

TYPES OF CROPS (1)

A crop is a plant or plant product that can be grown and harvested for profit or subsistence. By use, crops fall into six categories: food crops, feed crops, fiber crops, oil crops, ornamental crops, and industrial crops.

Food crops, such as fruit and vegetables, are harvested for human consumption. Grains, such as corn, wheat, and rice, are the world's most popular food crops.

Food crops were the first crops to be harvested through agriculture. Agricultural development and the growth of civilizations led to the diversity of other types of crops.

Feed Crops

Feed crops, such as oats and alfalfa, are harvested for livestock consumption. These crops contain nutrients that animals need to develop. They are grown in agricultural fields but can also be found in natural meadows and pastures.

The most popular type of feed crop is a forage crop. Animals feed directly on forages, such as grasses. Forages that are cut and fed to livestock while they are still fresh are called green chop. Alfalfa is a popular crop fed to livestock as green chop.

Some forages are cut, allowed to dry in the field, and stored. These are called hay crops.

Another type of forage crop is silage. Silage crops are harvested, then stored under conditions that allow the forage to break down (ferment) into acids. The wet, acidic silage is fed to livestock such as cattle.

Principle feed crops include corn, barley, wheat, and oats. Each of these crops has different properties that are better suited for some animals' diets over others. Barley, which is harder to digest, is most often fed to beef and dairy cattle because they have a tough, four-chambered stomach. Hull-less barley, which is easier to digest, is fed to swine and poultry.

The production of feed crops has risen dramatically with increased demand for meat worldwide. Increased production of feed crops has changed the agricultural landscape.



The Food and Agriculture Organization (FAO) says 33 percent of arable land on Earth is used to produce food for livestock. This limits the production of crops for human consumption, especially for the world's poorest people. Feed crops and grazing pastures disturb natural water cycles, drawing away water from underground aquifers that provide the earth with a constant and balanced supply of water.

Forests have been cleared to create pastures where livestock can graze. Almost 70 percent of land cleared from the Amazon rain forest, for instance, has been turned over to grazing.

Fiber Crops

Fiber crops, such as cotton and hemp, are harvested for textile and paper products. Textiles, or cloth, are made from the dried and processed fibers of certain plants. Most fibers used to make textiles are taken from the stem or roots of plants such as flax. Flax is used to make linen.

Other parts of a plant can be harvested for fiber. Cotton, the most popular fiber crop in the world, is harvested from the light, fluffy “boll” of fiber that surrounds the plant’s seeds. Textiles made from bamboo are manufactured from the pulp of bamboo plants.



Pulp from other fiber crops can be used in a variety of products. Fiber pulp may be used instead of wood pulp to manufacture paper products.

The hemp plant is an interesting and controversial example of a fiber crop. The fibers of the hemp plant are strong and durable, perfect for products such as paper, textiles, ropes, nets, and sailcloth for ships. Hemp advocates see the plant as a versatile and ecological source of fiber.

But some varieties of the hemp plant are used to make marijuana, a narcotic drug. Marijuana is illegal to grow and use in most parts of the United States. (The drug is legally grown and sold for medical use in some places.) Opponents of hemp argue that increased harvesting of hemp crops will lead to increased production and use of marijuana.

Словник-мінімум

profit

subsistence

food crops

feed crops

прибуток

існування

продовольчі культури

кормові культури

<i>fiber crops</i>	<i>луб'яні культури</i>
<i>forage crops</i>	<i>кормові культури</i>
<i>oil crops</i>	<i>олійні культури</i>
<i>ornamental crops</i>	<i>декоративні культури</i>
<i>industrial crops</i>	<i>технічні культури</i>
<i>alfalfa</i>	<i>люцерна</i>
<i>pasture</i>	<i>пасовище</i>
<i>hay</i>	<i>сіно</i>
<i>silage</i>	<i>силос</i>
<i>acid</i>	<i>кислота</i>
<i>property</i>	<i>особлива риса</i>
<i>digest</i>	<i>засвоювати/ перетравлювати</i>
<i>stomach</i>	<i>шлунок</i>
<i>hull</i>	<i>скорлупа</i>
<i>landscape</i>	<i>ландшафт</i>
<i>poor</i>	<i>бідний</i>
<i>underground aquifer</i>	<i>підземний водоносний горизонт</i>
<i>graze</i>	<i>випасатися</i>
<i>cotton</i>	<i>бавовна</i>
<i>hemp</i>	<i>конопля</i>
<i>flax</i>	<i>льон</i>
<i>linen</i>	<i>ляне полотно</i>
<i>fluffy</i>	<i>пухнастий</i>
<i>bamboo</i>	<i>бамбук</i>
<i>rope</i>	<i>канат, мотузка</i>
<i>net</i>	<i>сітчатий матеріал</i>
<i>advocate</i>	<i>відстоювати, пропагувати</i>
<i>versatile</i>	<i>різноманітний</i>
<i>marijuana</i>	<i>марихуана</i>
<i>drug</i>	<i>наркотик</i>
<i>illegal</i>	<i>незаконний</i>
<i>opponent</i>	<i>противник</i>

Вправа 1

Знайдіть еквіваленти слів і словосполучень у тексті

Кормові культури, для людського існування, продовольчі культури, декоративні культури, технічні культури, споживання, розвиток сільського господарства, різноманіття культур, містити поживні речовини, потрібні для

розвитку, силос, в умовах, розпадатися на кислоти, різні властивості, важко перетравлювати, чотирикамерний шлунок, свійська птиця, збільшення попиту, збільшення обсягів виробництва, порушувати кругообіг води, корені рослин, виготовляти лляне полотно, насіння рослин, замість деревини, нелегальний, у медичних цілях.

Вправа 2

Дайте відповіді на запитання

1. What is a plant or a plant product that can be grown and harvested for profit or subsistence?
2. Which are six categories of crops?
3. What for feed crops are grown?
4. Where are feed crops grown?
5. What is the most popular type of feed crop?
6. What is hay crops?
7. What is the principle feed crops?
8. What does the food and agriculture organization say?
9. What do feed crops and grazing pasture?
10. Why forests have been cleared?
11. What is clothes made from?
12. What from is cotton harvested?
13. What properties do the fibers of the hemp have?
14. Why some varieties of the hemp are illegal to grow?

Вправа 3

Закінчіть переклад речень

1. A crop is a plant or plant product that can be grown and harvested for profit or (існування).
2. Grains, such as corn, wheat, and rice, are the world's most popular food (культури).
3. These crops contain nutrients that animals need to (розвиватися)
4. They are grown in agricultural fields but can also be found in natural meadows and (пасовацях).
5. The most popular type of feed crop is a (кормові культури).
6. Silage crops are harvested, then stored under conditions that allow the forage to break down (ferment) into (кислоти).
7. Principle feed crops include corn, barley, wheat, and (овес).

8. Barley, which is harder to digest, is most often fed to beef and dairy cattle because they have a tough, four-chambered (шлунок).
9. Hull-less barley, which is easier to digest, is fed to swine and (свійська птиця).
10. Most fibers used to make textiles are taken from the stem or roots of plants such as (льон).
11. Other parts of a plant can be harvested for (волокно).

Вправа 4

Відкоригуйте твердження

1. By use, crops fall into four categories: food crops, oil crops, ornamental crops, and industrial crops.
2. Grains, such as corn, wheat, and rice, are the world's most popular industrial crops.
3. Feed crops, such as oats and alfalfa, are harvested for birds consumption.
4. Alfalfa is a popular crop fed to livestock as green flowers.
5. Silage crops are harvested, then stored under conditions that allow the forage to join into acids.
6. Principle feed crops include cabage, tomatoes, turnip
7. Barley, which is harder to digest, is most often fed to chicken because they have a tough, four-chambered stomach.
8. Feed crops and grazing pastures help natural water cycles, drawing in a water from underground aquifers that provide the earth with a constant and balanced supply of water.
9. Most fibers used to make textiles are taken from the stem or roots of plants such as flax.
10. Opponents of hemp argue that increased harvesting of hemp crops will lead to decreased production and no-use of marijuana.

Вправа 5

Знайдіть переклад до слів

- | | |
|---------------------|----------------------|
| 1) feed crops | a) технічні культури |
| 2) digest | b) бамбук |
| 3) silage | c) вигода, прибуток |
| 4) pasture | d) льон |
| 5) industrial crops | e) сіно |
| 6) versatile | f) кормові культури |

- 7) bamboo
- 8) flax
- 9) cotton
- 10) graze
- 11) landscape
- 12) hay
- 13) profit
- 14) food crops
- 15) ornamental crops

- g) бавовна
- h) різноманітний
- i) випасатися
- j) перетравлювати
- k) продовольчі культури
- l) декоративні культури
- m) пасовище
- n) ландшафт
- o) силос

Вправа 6

Знайдіть визначення запропонованих термінів

- | | |
|----------------|---|
| 1) barley | a) birds, such as chickens, that are bred for their eggs and meat |
| 2) oats | b) the act of using, eating, or drinking something |
| 3) food crops | c) the threads that grow around the seeds of a tall plant grown especially in the US, China, and South Asia |
| 4) rice | d) any of various usually liquid substances that can react with and sometimes dissolve other materials |
| 5) poultry | e) a crop, such as rice or wheat, that is grown for human consumption |
| 6) consumption | f) a plant with blue flowers grown for its stems or seeds, or the thread made from this plant |
| 7) cotton | g) a plant that is a type of grass, or its grain used in baking and cooking or to feed animals |
| 8) linen | h) a tall plant like grass with long, straight hairs growing from the head of each stem, or the grain from this plant, used for food and for making beer and whisky |
| 9) acid | i) the small seeds of a particular type of grass, cooked, and eaten as food |

вирощують в Прикарпатті. Найвищі врожаї картоплі збирають на Поліссі, оскільки тут достатня кількість вологи, супіщані ґрунти з добрим доступом повітря. Власне врожайність картоплі є стабільно високою і перевищує 120 ц/га.

Найпоширенішими овочевими культурами на Україні є білокачанна капуста, помідори, огірки, цибуля, столові буряки, морква тощо. Баштанні рослини є різновидністю овочевих культур, до них відносяться кавуни, дині, гарбузи.

Вирощування овочів (близько 40 видів) поширене на всій території країни, але найбільше у господарствах степової та лісостепової зон.

Помідори, перець, баклажани культивують у південних областях, а огірки та інші види городини для консервування та соління - в північній частині Лісостепу і на Поліссі.

Вправа 9

Складіть план до тексту *Types of crops* (5-6 пунктів)

Topic 12

TYPES OF CROPS (2)

Oil Crops

Oil crops, such as canola and corn, are harvested for consumption or industrial uses. Technologies developed in the past century have enabled crops to be processed and broken down into their primary components, including oil. Soybeans, for example, represented 56 percent of world oilseed production and 79 percent of all edible oil consumed in the United States in 2000.

Oil crops are harvested for use in cooking, such as olive oil and corn oil. Oil crops are also harvested for industrial use, such as oil paints, soaps, and lubrication for machinery.

Fuel made from oil crops is called biofuel. The demand for biofuels has grown in recent years. Rising gas prices, concerns about global warming, and a desire for energy self-sufficiency have led governments and businesses to invest in biofuel research.

There are two main types of biofuel that use oil crops: bioethanol and biodiesel.

Bioethanol is an alcohol made from fermented materials that come from sugar and starch crops. These crops include sugar cane, corn, and wheat. Bioethanol can be used as a fuel for vehicles, but it is usually used as a gasoline additive to improve vehicle emissions. Bioethanol is used widely in the United States and Brazil, where an abundance of corn and sugar cane crops facilitate its production.

Biodiesel is made by combining vegetable oils with alcohol. Nuts, such as coconuts, macadamias, and pecans, are excellent sources of oil used to manufacture biodiesel. Biodiesel can be used in diesel engines, such as those used by buses. Brazil, the United States, and the European Union (particularly Germany) manufacture and use biodiesel on a large scale.

Biofuels provide almost 2 percent of the world's transport fuel. Many scientists and economists predict that number will rise as oil production decreases in the next century.

Ornamental Crops



Ornamental crops, such as dogwood and azalea, are harvested for landscape gardening. Ornamental crops are most often grown in nurseries, where they are purchased for residential or commercial settings.

Ornamental crop production has deep historical roots. The tulip crop of the Netherlands, for example, has become a symbol of that country.



Today, ornamental crop production is an important economic activity in many developing countries. Kenya, for example, is a major exporter of roses and carnations. Kenyan flower growers have situated their greenhouses near the shores of Lake Naivasha and Lake Victoria, where the soil is fertile and

the water is abundant and fresh.

Industrial Crops

Industrial crops, such as rubber and tobacco, are harvested for their products' use in factories or machines. Industrial crops include all crops used in the production of industrial goods, such as fiber and fuel products.

Rubber is produced naturally from a wide variety of plants, but predominantly from the Hevea tree indigenous to Brazil. Rubber is harvested for its latex. Latex is an extremely tough fluid found in the inner bark of the Hevea tree. Latex is obtained by tapping-cutting or shaving the bark with a sharp knife and collecting the latex in cups. When mixed with chemicals, latex creates solid rubber blobs, called curds. Rubber curds are pressed between rollers to remove excess moisture and to form sheets. The sheets are packed and shipped for use in tires, machine belts, shoe soles, and other products.

Rubber has been used by civilizations for thousands of years. One of the earliest uses of rubber was to create balls for use in games in the Olmec Empire in what is today Mexico. Today, rubber is still used to manufacture durable toys, as well as boots, flooring, balloons, and medical supplies.

Словник-мінімум

canola

enable

soybean

edible

paint

soap

ріпак

сприяти

соєві боби

їстівний

фарба

мило

<i>lubrication</i>	<i>мастило</i>
<i>fuel</i>	<i>паливо</i>
<i>global warming</i>	<i>глобальне потепління</i>
<i>desire</i>	<i>бажати</i>
<i>self-sufficiency</i>	<i>самозабезпеченість</i>
<i>government</i>	<i>уряд</i>
<i>starch</i>	<i>крохмаль</i>
<i>sugar cane</i>	<i>цукровий очерет</i>
<i>additive</i>	<i>добавка, присадка</i>
<i>emissions</i>	<i>викиди</i>
<i>facilitate</i>	<i>спряти</i>
<i>coconut</i>	<i>кокос</i>
<i>macadamia</i>	<i>макадамія</i>
<i>pecan</i>	<i>горіх-пекан</i>
<i>large scale</i>	<i>великий обсяг</i>
<i>predict</i>	<i>передбачати</i>
<i>decrease</i>	<i>зменшуватися</i>
<i>dogwood</i>	<i>кизил</i>
<i>azalea</i>	<i>азалія</i>
<i>tulip</i>	<i>тюльпан</i>
<i>carnation</i>	<i>гвоздика</i>
<i>abundant</i>	<i>рясний</i>
<i>rubber</i>	<i>каучук</i>
<i>tobacco</i>	<i>табак (тютюн)</i>
<i>premidonantly</i>	<i>переважно</i>
<i>fluid</i>	<i>рідина</i>
<i>inner bark</i>	<i>луб, внутрішня кора</i>
<i>tapping</i>	<i>натискання</i>
<i>moisture</i>	<i>волога</i>
<i>medical supplies</i>	<i>медикаменти</i>

Вправа 1

Перекладіть слова і словосполучення українською мовою

Canola and corn, for consumption or industrial use, developed technologies, primary components, oilseed production, edible oil, oil crops, lubrication for machinery, biofuel, demand, in recent year, rising prices, global warming, a desire for energy self-sufficiency, governments and businesses, to invest in biofuel research, fermented materials, sugar cane, gasoline additive, to improve vehicle emissions, on a large scale, many scientists and economists, oil production

decreases, for landscape gardening, for residential or commercial settings, deep historical roots, a symbol of a country, an important economy activity, in many developing countries, a major exporter, the soil is fertile, industrial goods, a wide variety of plants, an extremely tough fluent found, to remove excess moisture.

Вправа 2

Дайте відповіді на запитання

1. What are oil crops harvested for?
2. Why crops are enabled to be processed and broken down into their primary components?
3. What does represent 56% of world oil seed production?
4. What is an olive oil?
5. What is the name of the fuel made from oil crops?
6. Why do governments and businesses invest in biofuel research?
7. Which are two main types of biofuel?
8. What is bioethanol?
9. Why bioethanol is used widely in the United States?
10. What is the principle of biodiesel manufacturing?
11. What does provide almost two percents of the world's transport fuel?
12. What crops are harvested for landscape gardening?
13. Where are ornamental crops most often grown?
14. What crops are harvested for their products' use in factories or machines?
15. Why is rubber harvested?
16. What is rubber used for?

Вправа 3

Заповніть пропуски у реченнях відповідними словами з тексту

1. Oil crops, such as ... and ..., are harvested for ... or industrial uses.
2. Oil crops are also harvested for industrial use, such as ..., ..., and
3. There are two main types of biofuel that use oil crops: ... and
4. These crops include sugar ..., ..., and
5. Bioethanol is used widely in the United States and Brazil, where an abundance of ... and ... facilitate its production.
6. Nuts, such as ..., ..., and ..., are excellent sources of oil used to manufacture biodiesel.
7. Biofuels provide almost 2 percent of the world's transport fuel. Many ... and ... predict that number will rise as oil production decreases in the next century.

8. Ornamental crops, such as ... and ..., are harvested for landscape gardening.
9. Kenya, for example, is a major exporter of ... and
10. Industrial crops, such as ... and ..., are harvested for their products' use in factories or machines.
11. The sheets are packed and shipped for use in ..., ..., ..., and other products.
12. Today, rubber is still used to manufacture ..., as well as ..., ..., ..., and

Вправа 4

З'єднайте частини речень опираючись на текст

- | | |
|---|--|
| <p>11. When mixed with chemicals, latex creates ...</p> | <p>a) ... that come from sugar and starch crops.</p> |
| <p>12. Biofuels provide almost 2 percent ...</p> | <p>b) ... durable toys, as well as boots, flooring, balloons, and medical supplies.</p> |
| <p>13. One of the earliest uses of rubber ...</p> | <p>c) ... are harvested for landscape gardening.</p> |
| <p>14. Rubber is produced naturally from a wide variety of plants ...</p> | <p>d) ... are harvested for use in cooking.</p> |
| <p>15. Bioethanol can be used as a fuel for vehicles ...</p> | <p>e) of the world's transport fuel.</p> |
| <p>16. Bioethanol is an alcohol made from fermented materials ...</p> | <p>f) ... solid rubber blobs, called curds.</p> |
| <p>17. Oil crops, such as olive oil and corn oil ...</p> | <p>g) ... but predominantly from the Hevea tree indigenous to Brazil.</p> |
| <p>18. The tulip crop of the Netherlands ...</p> | <p>h) ... such as those used by buses.</p> |
| <p>19. Industrial crops, such as rubber and tobacco ...</p> | <p>i) but it is usually used as a gasoline additive to improve vehicle emissions.</p> |
| <p>20. Ornamental crops, such as dogwood and azalea ...</p> | <p>j) ... was to create balls for use in games.</p> |
| <p>21. Today, rubber is still used to manufacture ...</p> | <p>k) ... is called biofuel.</p> |
| <p>22. Biodiesel can be used in</p> | <p>l) ... has become a symbol of that</p> |

diesel engines ...

country.

23. Fuel made from oil
crops ...

m) ... are harvested for their
products' use in factories or
machines

Вправа 5

Відкоригуйте твердження

1. Oil crops, such as canola and corn, are harvested for landscape gardening.
2. Fuel made from oil crops is called biodiesel.
3. There are two main types of rubber crops: bioethanol and biodiesel.
4. Bioethanol is a carbohydrate made from fermented materials that come from sugar and starch crops.
5. Bioethanol can be used as an oil for personal use, but it is usually used as a gasoline additive to improve vehicle emissions.
6. Biodiesel is made by combining fruits and sugar oils with nitrates.
7. Ornamental crops, such as flax and coconut, are harvested for landscape gardening.
8. Today, tulip crop production is an important economic activity in many advanced countries.
9. Industrial crops, such as silk and cotton, are harvested for their products' use in factories or machines.
10. Rubber is produced in nurseries from a wide variety of plants, but predominantly from the dogwood tree indigenous to Brazil.
11. Today, rubber is useless to manufacture durable toys, as well as T-shirts, ceiling, balloons, and medical supplies.

Вправа 6

Знайдіть переклад до слів

- | | |
|-------------------|-------------------------|
| 1) enable | a) горіх-пекан |
| 2) fuel | b) тюльпан |
| 3) starch | c) добавка |
| 4) pecan | d) луб |
| 5) fluid | e) паливо |
| 6) moisture | f) викиди |
| 7) inner bark | g) цукровий очерет |
| 8) global warming | h) сприяти |
| 9) canola | i) глобальне потепління |
| 10) sugar cane | j) волога |

- | | |
|---------------|-------------|
| 11) additive | k) кизил |
| 12) emissions | l) ріпак |
| 13) dogwood | m) крохмаль |
| 14) tulip | n) рідина |

Вправа 7

Знайдіть визначення запропонованих термінів

- | | |
|---------------------|---|
| 1) soybean | a) to use a substance such as oil to make a machine operate more easily, or to prevent something sticking or rubbing. |
| 2) lubricate | b) a plant or bush with brightly coloured flowers, grown in gardens. azaleas are a type of rhododendron. |
| 3) dogwood | c) a substance that flows and is not solid. |
| 4) azalea | d) any item that is essential for treating illness or injury. |
| 5) carnation | e) the group of people who officially control a country. |
| 6) fluid | f) a type of bean grown especially in asia and the us, used as a food for people and animals. |
| 7) medical supplies | g) the hard outer covering of a tree. |
| 8) emission | h) a bush or small tree that has flowers, growing either wild or in gardens. |
| 9) government | i) (a plant with) a small flower with a sweet smell, usually white, pink, or red in colour |
| 10) bark | j) the act of sending out gas, heat, light, etc. |

Вправа 8

Перекладіть уривок тексту на англійську мову

Технічними називаються культури, які переважно є сировиною для харчової та легкої промисловості. За значенням їх поділяють на волокнисті - льон-довгунець, коноплі; цукроноси - цукрові буряки; олійні - соняшник, льон-кудряш, соя, ріпак; ефіроолійні - троянда, кмин, м'ята тощо; лікарські - валеріана, горицвіт та ін.

Провідною технічною культурою в Україні є цукрові буряки, під якими зайнято 26% площі, відведеної під технічні культури (раніше близько 14%). Цукрові буряки потребують родючих ґрунтів, багато сонячних і теплих днів, значного зволоження. Тому основним районом їх вирощування є Лісостеп (понад 85 % виробництва цукрових буряків), а також прилеглі до нього райони Степу і Полісся. В останні роки урожайність цукрових буряків дещо знизилася і коливається в межах 170-190ц/га.

Соняшник - світлолюбна, посухостійка культура, що потребує багато тепла і родючих ґрунтів. Найкращі умови для його вирощування є в степовій і частково лісостеповій зонах країни. На посіви соняшнику припадало у 2010 році понад 70 % усієї площі, відведеної під технічні культури. З інших олійних культур вирощують ріпак (на Поліссі і в Лісостепу), льон-кудрявець, арахіс, рицину й сою (у Степу).

Провідне місце у рослинництві займає вирощування зернових. Під зерновими культурами в Україні зайнято понад 57% посівних площ. Традиційно найважливішою зерною культурою в Україні є пшениця, особливо озима, яка на чорноземах дає добрі врожаї (у 2012 р. середня урожайність з гектара пшениці склала 28,5 ц/га, що є найвищим з показників за роки незалежності). Озиму пшеницю висівають восени, щоб використати осінню і весняну вологу в ґрунті. Вона займає третину всієї площі зернових. Вирощують озиму пшеницю переважно у степовій і лісостеповій зонах. Посіви ярої пшениці займають незначні площі у східних областях України, де клімат континентальніший і взимку випадає мало снігу, який не може захистити посіви від вимерзання. Загальний збір пшениці складає 21,5 млн. т.

Topic 13

HARVESTING CROPS

Methods for growing and harvesting crops have developed over thousands of years. The earliest crops were grown in Mesopotamia around 5500 BCE. These crops, indigenous to an agriculturally rich area called the Fertile Crescent, were grown near local sources of freshwater so they could be irrigated relatively easily. Wheat, barley, and figs were among the first crops.



The development of agriculture led to more sophisticated methods of harvesting crops. Crop rotation was the most significant innovation. In crop rotation, one crop is planted one year, then a different crop is planted the next year on the same land. This helps preserve the soil and reduce the chance for disease.

Crop rotation and fertilization, which makes soil more productive, allowed farmers to grow more crops on less land. These innovations also allowed crops to be grown in areas where they might not grow naturally. Improved engineering allowed rivers to be dammed and diverted to provide water for crops. All of these developments increased the abundance of crops, which could be used for trade and industrial use.



Today, agriculture is the largest industry in the world. Millions of people harvest crops for subsistence or business purposes. Some tools used to harvest crops have not changed in a thousand years – plows, rakes, sickles. Most of all, harvesting crops still relies on human labor.

The tools and machinery used to harvest crops have grown much more complex and expensive, however. Fertilizers, which many farmers need to be economically competitive, cost more than many farmers in the developing world can afford. Machinery, such as tractors and plows, can cost hundreds of thousands of dollars.

Словник-мінімум

indigenous

Fertile Crescent

місцевий

Родючий Півмісяць (регіон)

<i>relatively</i>	<i>на Близькому Сході, що</i>
<i>fig</i>	<i>включає Левант,</i>
<i>sophisticated</i>	<i>Межиріччя та Стародавній Єгипет,</i>
<i>significant</i>	<i>відомий як «колиска цивілізації»)</i>
<i>abundance</i>	<i>відносно</i>
<i>plow</i>	<i>інжир</i>
<i>rake</i>	<i>досвідчений, позбавлений простоти</i>
<i>sickle</i>	<i>важливий</i>
	<i>достаток</i>
	<i>плуг</i>
	<i>граблі</i>
	<i>серп</i>

Вправа 1

Перекладіть слова і словосполучення українською мовою

Methods for growing and harvesting, an agriculturally rich area, local sources of fresh water, the development of agriculture, sophisticated methods, crop rotation, significant innovation, on the same land, preserve the soil, reduce the chance for disease, fertilization, improved engineering, the abundance of crops, industrial use, business purposes, rely on human labor, complex and expensive, economically competitive.

Вправа 2

Дайте відповіді на запитання

1. What was grown in Mesopotamia around 5500 BCE.
2. What is the Fertile Crescent?
3. Which crops were among the first?
4. What have led to more sophisticated methods of harvesting crops?
5. What was the most significant innovation?
6. What is the principle of crop rotation?
7. How does it affect on soil and crops?
8. What have lead farmers to grow more crops on less land?
9. What have improved engineering allowed?
10. Which agricultural tools are still used nowadays?
11. What agricultural machinery can you name?

Вправа 3

Відкоригуйте твердження

1. Methods for growing and harvesting crops have discovered approximately a million years ago.
2. Wheat, corn, and soy were among the first crops.
3. The development of biofuel led to more sophisticated methods of harvesting crops.
4. Crop rotation was the most insignificant innovation.
5. In crop rotation, one crop is planted five years, then a different crop is planted the next two years on the same land.
6. Crop rotation and mechanisation, which makes soil more productive, allowed farmers to grow more crops on the same land.
7. All of these developments decreased the abundance of crops, which could be used for trade and industrial use.
8. Millions of people harvest crops for subsistence or industrial waste.
9. Some tools used to harvest crops have disappeared through thousand years – plows, rakes, sickles.

Вправа 4

Знайдіть визначення запропонованих термінів

- | | |
|----------------|---|
| 1) plow | a) a tool with a short handle and a curved blade, used for cutting grass and grain crops. |
| 2) rake | b) naturally existing in a place or country rather than arriving from another place. |
| 3) sickle | c) a large farming tool with blades that digs the soil in fields so that seeds can be planted. |
| 4) indigenous | d) a motor vehicle with large back wheels and thick tyres, used on farms for pulling machinery. |
| 5) significant | e) a garden tool with a long handle and long, pointed metal parts sticking out in a row at the bottom, used for making the earth level or for collecting leaves, etc. |
| 6) tractor | f) important or noticeable. |

Вправа 5

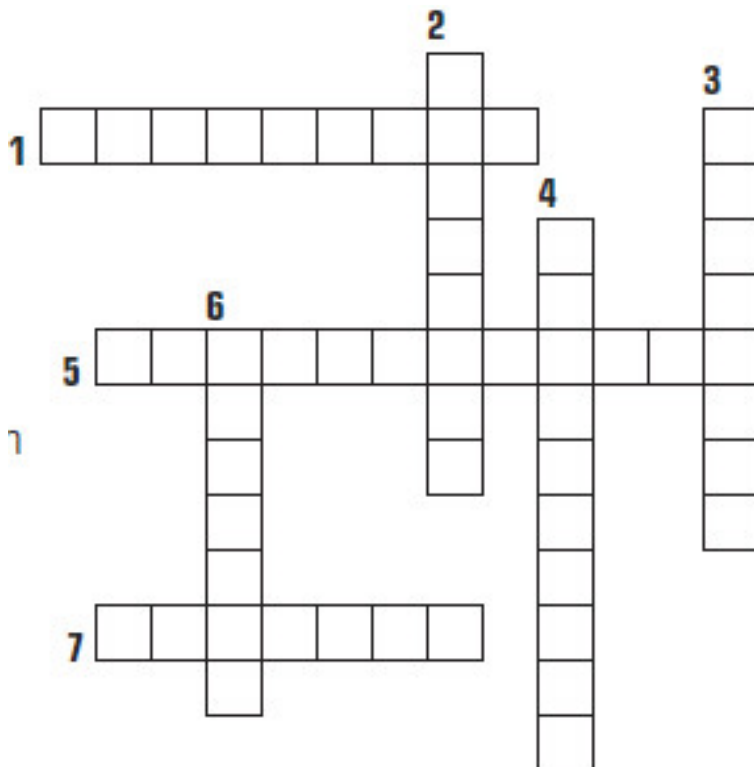
Перекладіть речення українською мовою

1. Methods for growing and harvesting crops have developed over thousands of years.

2. These crops, indigenous to an agriculturally rich area called the Fertile Crescent, were grown near local sources of freshwater so they could be irrigated relatively easily.
3. Wheat, barley, and figs were among the first crops.
4. Crop rotation was the most significant innovation.
5. Crop rotation and fertilization, which makes soil more productive, allowed farmers to grow more crops on less land.
6. All of these developments increased the abundance of crops, which could be used for trade and industrial use.
7. Some tools used to harvest crops have not changed in a thousand years – plows, rakes, sickles.
8. The tools and machinery used to harvest crops have grown much more complex and expensive, however
9. Machinery, such as tractors and plows, can cost hundreds of thousands of dollars.

Вправа 6

Розгадайте кросворд



Across

1. A person who raises bees
5. A doctor who looks after animals

7. A scientist who works with chemicals

Down

2. A person who keeps machines and vehicles in good condition

3. A person who designs farm machinery or farm structures

4. An expert on crops and soils

6. Someone who drives goods to the market

Вправа 6

Напишіть твір на тему “Crops Harvested In My Native Area”

Topic 14

AGRICULTURE IN UKRAINE

Ukraine is rich in farming and forestry resources. According to the Statistics, about 71 percent of the country's surface (41 million hectares) was used for agricultural activities.

About 80 percent of the agricultural area is arable land, two-thirds of it the agriculturally rich "black soil" (chernozem). The primary food harvest products are barley, maize, potatoes, rice, soybeans, sugar beets, and wheat. The primary meat products are beef and veal, lamb, pork, chicken, horse, and rabbit. In terms of value, the largest agricultural exports in 1998 were refined sugar, raw sugar, beef and veal, sunflower seed, and fish. The total value of agricultural exports in 1998 estimated \$1.898 billion. The total value of agricultural imports in 1998 was \$999 million. The largest single crop produced in 1999 was potatoes at 15.4 million metric tons. The number-two crop was sugar beets at 13.89 million metric tons, followed by wheat at 13.47 million metric tons. The main livestock product was beef and veal with 786,000 metric tons, followed by swine with 668,000 tons, and chicken with 194,500 tons.

In recent years, agricultural production has declined drastically because of a



decrease in the number of tractors and combine harvesters in working order and to the lack of fertilizers and pesticides.

According to official data, between 1991 and 1997, the number of tractors in use decreased from 497,300 to 361,000. (In order to operate efficiently, it is estimated that the country would need 515,000 tractors in use.) Similar shortfalls exist for harvesting combines. Between 1990 and 1997, the consumption of pesticides and fertilizers per hectare declined about 78 percent. From 1995 to 1999, crop production declined by an average of almost 10 percent per year, while livestock production declined by an average of 9 percent per year. These shortfalls in agricultural inputs reflect declining investment in agriculture, and feed directly into declining production.

Household plots and private farms accounted for about 15 percent of the Ukrainian territory and they filled an important role in the delivery of products to the marketplace.

In general, the agricultural sector is experiencing serious internal difficulties, due to the transitional nature of the economy. A new policy and direction for Ukraine's agricultural sector is necessary. Agriculture poses the greatest challenge to the survival of Ukraine's political leaders, because almost half of the Ukraine's population live in rural areas.

Although typically known as the industrial base of the Soviet Union agriculture is a large part of Ukraine's economy. In 2008 the sector accounted for 8.29% of the country's GDP and by 2012 has grown to 10.43% of the GDP. Agriculture accounted for \$13.98 billion value added to the economy of Ukraine in 2012, however



despite being a top 10 world producer of several crops such as wheat and corn Ukraine still only ranks 24 out of 112 nations measured in terms of overall agricultural production. Ukraine is the world's largest producer of sunflower oil, a major global producer of grain and sugar, and future global player on meat and dairy markets. It is also one of the largest producers of nuts. Ukraine also produces more natural honey than any other European country and is one of the world's largest honey producers, an estimated 1.5% of its population is involved in honey production, therefore Ukraine has the highest honey per capita production rate in the world. Because Ukraine possesses 30% of the world's richest black soil, its agricultural industry has a huge potential. However, farmland remains the only major asset in Ukraine that is not privatized. The agricultural industry in Ukraine is already highly profitable.

Ukraine's flag resembles the nation's farmlands.

Ukraine is the world's 6th largest, 5th if not including the EU as a separate state, producer of corn in the world and the 3rd largest corn exporter in the world. In 2012 Ukraine signed a contract with China, the world's largest importer of corn, to supply China with 3 million tonnes of corn annually at market price, the deal also included a \$3 billion line of credit extension from China to Ukraine.

In 2014 Ukraine total grain crop was estimated to be record 64 million metric tons, however as several regions are claiming their independence due to the War in Donbass and the Crimea Crisis the actual available crop yield was closer to 60.5 million metric tons. By October Ukrainian grain exports reached 11 million

metric tons. Due to the decline of the metallurgy industry, Ukraine's top export in prior years, as a result of the War in Donbass agricultural products accounted for the nation's largest exported set of goods.

Словник-мінімум

<i>surface</i>	<i>поверхня</i>
<i>primary</i>	<i>візбірний; першорядний</i>
<i>veal</i>	<i>телятина</i>
<i>lamb</i>	<i>баранина</i>
<i>pork</i>	<i>свинина</i>
<i>rabbit</i>	<i>кролятина</i>
<i>swine</i>	<i>свиня</i>
<i>decline</i>	<i>знижуватися</i>
<i>drastically</i>	<i>кардинально</i>
<i>household plot</i>	<i>присадибна ділянка</i>
<i>marketplace</i>	<i>ринок; базарна площа</i>
<i>difficulty</i>	<i>складність</i>
<i>GDP</i>	<i>ВВП (валовий внутрішній продукт)</i>
<i>honey</i>	<i>мед</i>
<i>set of goods</i>	<i>набір товарів</i>

Вправа 1

Перекладіть слова та словосполучення з тексту українською мовою

Forestry resources, for agricultural activities, arable land, the primary food harvest products, need products, refined sugar, the total value, agricultural imports, metric tons, livestock product, agricultural production declined, the number of tractors and combined harvesters, the lack of fertilizers and pesticides, official data, shortfalls, consumption of pesticides, agricultural inputs, investment in agriculture, household plots, an important role, the delivery of products to the marketplace, internal difficulties, agriculture poses the challenge, rural areas, the industrial base, GDP, sunflower oil, honey production, farmland, highly profitable, exported set of goods.

Вправа 2

Дайте відповіді на запитання

1. For what was used about 71% percent of the Ukrainian surface?
2. How many percent does the arable land occupy?
3. What are the primary food harvest products?
4. What are the primary meat products?

5. What was the largest single crop produced in 1999?
6. Why has agricultural production declined drastically in recent years?
7. What does occupy about 15% of the Ukrainian territory and play an important role in the delivery of products to the marketplace?
- 8.

Вправа 3

З'єднайте частини речень опираючись на текст

- | | |
|--|--|
| 1) Ukraine is rich in ... | a) ... than any other European country and is one of the world's largest honey producers. |
| 2) About 80 percent of the agricultural area is ... | b) ... a decrease in the number of tractors and combine harvesters in working order and to the lack of fertilizers and pesticides. |
| 3) The primary food harvest products are ... | c) ... to be record 64 million metric tons. |
| 4) The primary meat products are ... | d) ... is already highly profitable. |
| 5) In recent years, agricultural production has declined drastically because of ... | e) ... declining investment in agriculture, and feed directly into declining production. |
| 6) These shortfalls in agricultural inputs reflect ... | f) ... arable land, two-thirds of it the agriculturally rich "black soil" (chernozem). |
| 7) In general, the agricultural sector is experiencing serious internal difficulties ... | g) ... sunflower oil, a major global producer of grain and sugar, and future global player on meat and dairy markets. |
| 8) Ukraine is the world's largest producer of ... | h) ... beef and veal, lamb, pork, chicken, horse, and rabbit. |
| 9) Ukraine also produces more natural honey ... | i) ... farming and forestry resources. |
| 10) The agricultural industry in Ukraine ... | j) ... due to the transitional nature of the economy. |
| 11) In 2014 Ukraine total grain crop was estimated ... | k) ... barley, maize, potatoes, rice, soybeans, sugar beets, and wheat. |

Вправа 4

Відкоригуйте твердження

1. About 80 percent of the agricultural area is desert land, two-thirds of it the agriculturally poor sand.
2. The largest single crop produced in 1999 was rice at 15.4 million metric tons.
3. The number-two crop was wheat at 13.89 million metric tons, followed by maize at 13.47 million metric tons.
4. The main livestock product was poultry with 786,000 metric tons, followed by pork with 668,000 tons, and ducks with 194,500 tons.
5. In recent years, agricultural production has grown extremely because of a increase in the number of tractors and combine harvesters in working order and to the lack of fertilizers and pesticides.
6. A new policy and direction for Ukraine's industrial sector is necessary.
7. Agriculture poses the greatest challenge to the survival of Ukraine's political leaders, because almost all of the Ukraine's population live in cities.
8. Ukraine in 2012, however despite being a top 10 world producer of several crops such as cacao beans and turnip Ukraine still only ranks 24 out of 112 nations measured in terms of overall agricultural production.
9. Ukraine is the world's largest producer of vegetables, a major global producer of grain and potatoes, and future global player on meat and dairy markets.
10. It is also one of the largest producers of coconuts.
11. Ukraine also produces more natural disaster than any other European country.
12. Ukraine's flag resembles the nation's rivers.
13. Due to the decline of the metallurgy industry, Ukraine's top export in prior years, as a result of the War in Donbass agricultural products accounted for the nation's largest exported set of goods.

Вправа 5

Знайдіть переклад до слів

- | | |
|-------------------|-----------------------|
| 1) veal | a) свинина |
| 2) lamb | b) картопля |
| 3) pork | c) присадибна ділянка |
| 4) decline | d) ячмінь |
| 5) household plot | e) соняшник |

- | | |
|---------------|-------------------|
| 6) difficulty | f) пестицид |
| 7) potato | g) телятина |
| 8) soybeans | h) цукровий буряк |
| 9) sugar beet | i) кукурудза |
| 10) barley | j) тваринництво |
| 11) sunflower | k) баранина |
| 12) pesticide | l) соєві боби |
| 13) livestock | m) скрута |
| 14) maize | n) знижувати |

Вправа 6

Знайдіть антоніми до слів

- | | |
|-------------|-------------|
| 1) decline | a) high |
| 2) low | b) export |
| 3) active | c) losses |
| 4) import | d) increase |
| 5) internal | e) inactive |
| 6) profit | f) external |

Вправа 7

Знайдіть визначення запропонованих термінів

- | | |
|------------|--|
| 1) chicken | a) a small animal with long ears and large front teeth that moves by jumping on its long back legs, or the meat of this animal eaten as food. |
| 2) horse | b) all the animals, plants, rocks, etc. in the world and all the features, forces, and processes that happen or exist independently of people, such as the weather, the sea, mountains, the production of young animals or plants, and growth. |
| 3) rabbit | c) the system of trade and industry by which the wealth of a country is made and used. |
| 4) beef | d) a sweet, sticky, yellow substance made by bees and used as food. |
| 5) nature | e) a type of bird kept on a farm for its eggs or its meat, or the meat of this bird that is cooked and eaten. |
| 6) economy | f) a sweet substance especially from the plants sugar cane and sugar beet, used to make food and drinks sweet. |
| 7) grain | g) a tall plant grown in many parts of the world for its |

yellow seeds, which are eaten as food, made into flour, or fed to animals

- 8) sugar h) a seed or seeds from a plant, especially a plant like a grass such as rice or wheat.
- 9) honey i) the flesh of cattle (= cows), eaten as food.
- 10) corn j) a large animal with four legs that people ride on or use for carrying things or pulling vehicles.

Вправа 8

Перекладіть речення українською мовою

1. About 80 percent of the agricultural area is arable land, two-thirds of it the agriculturally rich "black soil" (chernozem).
2. The primary food harvest products are barley, maize, potatoes, rice, soybeans, sugar beets, and wheat.
3. The largest single crop produced in 1999 was potatoes at 15.4 million metric tons.
4. In recent years, agricultural production has declined drastically because of a decrease in the number of tractors and combine harvesters in working order and to the lack of fertilizers and pesticides.
5. These shortfalls in agricultural inputs reflect declining investment in agriculture, and feed directly into declining production.
6. Household plots and private farms accounted for about 15 percent of the Ukrainian territory and they filled an important role in the delivery of products to the marketplace.
7. Ukraine is the world's largest producer of sunflower oil, a major global producer of grain and sugar, and future global player on meat and dairy markets.
8. Because Ukraine possesses 30% of the world's richest black soil, its agricultural industry has a huge potential.
9. Ukraine is the world's 6th largest, 5th if not including the EU as a separate state, producer of corn in the world and the 3rd largest corn exporter in the world.
10. In 2014 Ukraine total grain crop was estimated to be record 64 million metric tons, however as several regions are claiming their independence due to the War in Donbass and the Crimea Crisis the actual available crop yield was closer to 60.5 million metric tons.

Вправа 9

Перекладіть уривок тексту на англійську мову

Скотарство - одна з найважливіших галузей тваринництва. Воно поширене у всій території України (поголів'я, на початок 2008 року становило 7 млн. голів). Найбільше великої рогатої худоби в розрахунку на 100 га сільськогосподарських угідь - у Карпатах, Лісостепу і на Поліссі, найменше - у Степу.

Розрізняються скотарство молочного, молочно-м'ясного та м'ясного напрямків. М'ясо-молочними прийнято вважати такі господарства, в яких товарна продукція молока становить менш як 50 % від усієї реалізації. Якщо на м'ясо припадає понад 75 % і більше від вартості продукції скотарства, то господарство належить до м'ясного напрямку.

Загалом в Україні переважає скотарство молочно-м'ясного напрямку, яке характеризується значною питомою вагою корів у стаді. Молочне скотарство (частка корів - 65-90%) розвивається переважно навколо великих міст, де є споживач і на Поліссі, де є достатньо соковитих трав. Для районів інтенсивного землеробства з потужною кормовою базою, де високу частку становлять соковиті корми, властивий молочно-м'ясний напрям (корови становлять 40-50% поголів'я). Він характерний для Лісостепу, частково Степу, гірських районів Карпат та Криму. Хоч яловичина при молочно-м'ясному напрямі є супутнім товарним продуктом, але саме тут виробляється її найбільше.

Вправа 10

Напишіть власну статтю щодо обсягів експорту сільськогосподарської продукції у поточному році

Topic 15

AGRICULTURE OF GREAT BRITAIN

Great Britain is an industrial country. But agriculture is also well-developed. Britain produces nearly two-thirds of its total food requirements.

British climate and soils are not very good for agriculture. It is developing thanks to modern technologies.

The potatoes crop is widespread all throughout the country.

Four fifth of the land is devoted to agriculture. About one million people work on farms. Britain produces nearly two-thirds of its total food requirements. It is self-sufficient in milk, eggs, meat, potatoes and wheat.



The climate of Great Britain and soils are not very favourable for the development of agriculture. It is developing thanks to modern technology and scientific research. The most productive area is Lowland Britain.

In England and Wales the chief crops are wheat and barley. In Scotland the leading crop is oats. In Northern Ireland vast area is under oats and flax. The potatoes crop is widespread all throughout the country.

Horticulture produces a wide variety of fruit, vegetables and flower crops. Strawberries are the most popular soft fruit in Britain.



60 per cent of full-time farms are devoted mainly to dairy or beef cattle and sheep. Pig production is carried in most areas but it is particularly important in eastern Yorkshire and southern England, north-east Scotland and Northern Ireland. Poultry industry is growing rapidly and is becoming more important.

Britain's second major source of food is the surrounding sea (the fishing industry).

At present most farms in Britain are large, commercial farms. There is a number of traditional family farms, but they are not characteristics. Arable crops grown in Britain include cereals (wheat, oats), potatoes, sugar beet and fodder crops (turnip, swede, kale). There are 12 mln hectares of cultivated land under

crops (37%) and grass (40%). Britain is now the world's sixth largest exporter of cereals.

Словник-мінімум

<i>industrial country</i>	<i>промислово розвинена країна</i>
<i>horticulture</i>	<i>садівництво</i>
<i>favourable</i>	<i>сприятливий</i>
<i>barley</i>	<i>ячмінь</i>
<i>oats</i>	<i>овес</i>
<i>strawberry</i>	<i>полуниця</i>
<i>soft fruit</i>	<i>ягода</i>
<i>dairy cattle</i>	<i>молочна худоба</i>
<i>sheep</i>	<i>вівця</i>
<i>poultry</i>	<i>свійська птиця</i>
<i>fishing industry</i>	<i>рибальство</i>
<i>fodder crops</i>	<i>кормова культура</i>
<i>swede</i>	<i>бруква</i>
<i>kale</i>	<i>листова капуста</i>

Вправа 1

Перекладіть слова і словосполучення з тексту українською мовою

Industrial country, well-developed, total food requirements, climate and soils, modern technologies, widespread, work on farms, favorable climate, development of agriculture, scientific research, the most productive area, chief crops, oats and flax, horticulture, a wide variety of fruit, flower crops, soft fruit, dairy or beef cattle, pig production, poultry industry, major source of food, fishing industry, at present, commercial farms, sugar beet, exporter of cereals.

Вправа 2

Дайте відповіді на запитання

1. What percentage of total food requirements does Britain produce?
2. Why British climate is not very good for agriculture?
3. How does agriculture in Britain develop?
4. What crop is widespread all throughout the country?
5. Where do one million people work in Great Britain?
6. In what product Great Britain is self-sufficient?
7. What is the most productive area in Great Britain?
8. Which crops are the chief crops in England and Wales?
9. What is the most popular soft food in Britain?

10. What is the second major source of food in Great Britain?

Вправа 3

Заповніть пропускими відповідними словами з тексту

1. Great Britain is an ... country, but agriculture is also well-developed.
2. The is widespread all throughout the country.
3. About one million people work on
4. The climate of Great Britain and soils are not very favourable for ... of agriculture.
5. It is developing thanks to ... and
6. The most productive area is Lowland Britain.
7. In England and Wales the chief crops are ... and
8. In Scotland the leading crop is oats. In Northern Ireland vast area is under ... and
9. Horticulture produces a wide variety of ..., ... and
10. 60 per cent of full-time farms are devoted mainly to ... or ... and
11. Britain's second major source of

Вправа 4

Закінчіть переклад речень

1. Britain produces nearly two-thirds of its total food (потреби).
2. British climate and soils are not very good for (сільського господарства).
3. About one million people work (на фермах).
4. It is self-sufficient in (молоко, яйця, м'ясо, картопля та пшениця).
5. It is developing thanks to (сучасні технології та наукові дослідження).
6. In England and Wales the chief crops are (пшениця і ячмінь).
7. In Northern Ireland vast area is under (овес і льон).
8. 60 per cent of full-time farms are devoted mainly to (молочна, м'ясна худоба і вівці).
9. Poultry industry is growing rapidly and (стає усе більш важливою).
10. Britain's second major source of food (навколишнє море (рибна промисловість)).
11. Britain is now the world's sixth largest exporter of (злакових).

Вправа 5

Знайдіть переклад до слів

1) favourable

а) листовая капуста

- | | |
|-----------------|---------------------|
| 2) soft fruit | b) кормові культури |
| 3) fodder crops | с) редька |
| 4) swede | d) цукровий буряк |
| 5) kale | e) гречка |
| 6) turnip | f) полуниця |
| 7) strawberry | g) садівництво |
| 8) sugar beet | h) сприятливий |
| 9) horticulture | i) бруква |
| 10) buckwheat | j) ягода |

Вправа 6

Знайдіть визначення запропонованих термінів

- | | |
|----------------|--|
| 1) development | a) (the study and knowledge of) the practical, especially industrial, use of scientific discoveries. |
| 2) requirement | b) an area of land, together with a house and buildings, used for growing crops and/or keeping animals as a business. |
| 3) technology | c) a detailed study of a subject, especially in order to discover(new) information or reach a (new) understanding. |
| 4) farm | d) something that you must do, or something you need. |
| 5) research | e) the process of making or growing goods to be sold. |
| 6) science | f) the process in which someone or something grows or changes and becomes more advanced. |
| 7) production | g) (knowledge from) the careful study of the structure and behaviour of the physical world, especially by watching, measuring, and doing experiments, and the development of theories to describe the results of these activities. |

Вправа 7

Перекладіть речення українською мовою

1. Great Britain is an industrial country, but agriculture is also well-developed.
2. Britain produces nearly two-thirds of its total food requirements. It is self-sufficient in milk, eggs, meat, potatoes and wheat.
3. The climate of Great Britain and soils are not very favourable for the development of agriculture.
4. In England and Wales the chief crops are wheat and barley, in Scotland the leading crop is oats, in Northern Ireland vast area is under oats and flax.

5. 60 per cent of full-time farms are devoted mainly to dairy or beef cattle and sheep.
6. Pig production is carried in most areas but it is particularly important in eastern Yorkshire and southern England, north-east Scotland and Northern Ireland.
7. Britain's second major source of food is the surrounding sea (the fishing industry).
8. There is a number of traditional family farms, but they are not characteristics.
9. Arable crops grown in Britain include cereals (wheat, oats), potatoes, sugar beet and fodder crops (turnip, swede, kale).
10. There are 12 mln hectares of cultivated land under crops (37%) and grass (40%).
11. Britain is now the world's sixth largest exporter of cereals.

Topic 16

WHEAT IN THE USA

Wheat will grow on a wide range of soil types, but well-drained, medium and fine-textured soils are generally considered to be best adapted for wheat production. To improve the soils for wheat one should apply both manure and commercial fertilizers when needed.



The yield of wheat is generally affected by the amount of moisture in the soil at the time the crop is seeded.

Fall ploughing as soon after harvest as possible is generally recommended for both winter and spring wheat varieties.

Depth of ploughing seems to be less important than time of ploughing. The depth, necessary to obtain best results will, vary with soil and climatic conditions but will usually be not more than 6 to 7 inches.

There is no danger for low temperatures when seeding is done early. Both winter and spring wheats do best, having been sown early.

The best rate of seeding for the eastern part of the Great Plains area is 60 to 90 pounds per acre for either spring or winter wheat. However further to the west, as moisture becomes a limiting factor, only about 30 to 45 pounds should be used. Where the land is irrigated, in the Western states for example, 50 to 80 pounds are considered to be the best rate. These rates should be increased a little when wheat is seeded late because late seeding usually results in poor tillering.

Better results are known to be obtained by seeding wheat with the drill. Broadcasting is no longer used in most countries. The drill provides a uniform distribution of seed. It also places the seed at a uniform depth and covers it with the soil. Wheat may be harvested



with the header or the combine harvester. At present wheat is combined almost everywhere in the Plains area.

The moisture content of the grain should be not more than 14 per cent at the time of harvesting. If the grain is stored at a higher moisture content, it can be damaged by heat.

Wheat straw is usually used for bedding. If the straw is not needed for this purpose it should be returned to the land to increase the organic content of soil.

Словник-мінімум

<i>wheat</i>	<i>пшениця</i>
<i>manure</i>	<i>гній, добриво</i>
<i>fertilizer</i>	<i>добриво</i>
<i>to seed</i>	<i>сіяти</i>
<i>moisture</i>	<i>волога</i>
<i>to plow, to plough</i>	<i>орати</i>
<i>to harvest</i>	<i>збирати врожай,</i>
<i>variety</i>	<i>сорт, вид</i>
<i>depth</i>	<i>глибина</i>
<i>to sow</i>	<i>сіяти</i>
<i>rate</i>	<i>норма</i>
<i>acre</i>	<i>акр (0,4 га)</i>
<i>to irrigate</i>	<i>зрошувати</i>
<i>to increase</i>	<i>збільшувати</i>
<i>tillering</i>	<i>кущіння</i>
<i>drill</i>	<i>рядкова сівалка</i>
<i>broadcasting</i>	<i>сівба урозсип</i>
<i>combine</i>	<i>Комбайн</i>
<i>header</i>	<i>жатка, хедер</i>
<i>to damage</i>	<i>пошкоджувати</i>
<i>straw</i>	<i>солома</i>
<i>bedding</i>	<i>підстилка</i>

Вправа 1

Дайте значення слів та словосполучень:

to harvest - harvest - harvester - harvesting;

to sow - sowing - sown - sowed;

to seed - seed - seeder - seeding - seedy.

Вправа 2

Вкажіть правильну послідовність пунктів плану, виходячи з прочитаного тексту

1. Harvesting machinery.
2. Sowing.
3. Fertilization.
4. Wheat varieties.
5. Ploughing.
6. The use of wheat straw.
7. Soil moisture.
8. Soils for wheat.
9. Moisture content of grain stored.

Вправа 3

Вкажіть, які слова розташовані праворуч, можуть поєднуватися з словами, розташованими ліворуч:

land	mineral, organic;
fertilizer	mixed, small, chicken, fruit, grain, horticultural;
soil	sandy, well-drained, dark (light) coloured;
farm	hilly, rich, arable, flat, ploughed.

Вправа 4

Перекладіть речення:

1. Відомо, що рядкова сівалка забезпечує кращі результати при сівбі пшениці.
2. Кількість вологи в ґрунті впливає на врожайність пшениці.
3. Глибина оранки залежить від кліматичних умов та ґрунту.
4. Ні озима, ні яра пшениця не боїться низьких температур.

5. Яка норма висіву пшениці для вашого господарства?
6. Пшениця збирається комбайном.
7. Вологість зерна під час жнив повинна бути не вище 14%.
8. Пшенична солома може використовуватись або на підстилку або для покращення органічного складу ґрунту.

Вправа 5

Закінчіть речення:

1. Wheat will grow on ... of soil.
2. The best soils for wheat production are .
3. Time of ploughing is ... important than depth of ploughing.
4. ... temperatures do not damage ... when seeding is done early.
5. The drill provides ...

Вправа 6

Дайте відповіді на питання:

1. On what soils will wheat grow?
2. When should manure and commercial fertilizers be applied?
3. What kind of ploughing is recommended for wheat varieties?
4. What is the usual depth of ploughing?
5. Is broadcasting used now?
6. What does the drill provide?
7. How may wheat be harvested?
8. What moisture content of the grain is desirable?
9. How is wheat straw used?
10. How must the grain be stored?

Навчальне видання
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для самостійної роботи з дисципліни *«Англійська мова»*