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# **АНГЛИЙСКИЙ ЯЗЫК**

**Учебное пособие для студентов,  
обучающихся по направлениям подготовки  
19.03.03 Продукты питания животного происхождения  
36.03.02 Зоотехния  
19.03.01 Биотехнология**

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**Английский язык** : учебное пособие для студентов, обучающихся по направлениям подготовки 19.03.03 Продукты питания животного происхождения 36.03.02 Зоотехния 19.03.01 Биотехнология / И.А. Мальцева. – Персиановский : Донской ГАУ, 2018. – 143 с.

Учебное пособие состоит из 26 уроков, включающих в себя лексический материал, предусмотренный для данного курса, тексты по специальности, предназначенные для обучения чтению технической литературы по направлениям 19.03.03 Продукты питания животного происхождения 36.03.02 Зоотехния 19.03.01 Биотехнология; письменные и устные послетекстовые упражнения, предназначенные для закрепления основного лексического и грамматического материала по курсу английского языка. В пособие также включен грамматический справочник. Содержание курса соответствует государственному образовательному стандарту третьего поколения.

Цель пособия – сформировать у студентов умения и навыки чтения оригинальной литературы на английском языке, а также навыки употребления профессиональной лексики в устной и письменной речи.

Рекомендовано для студентов направления подготовки 19.03.03 Продукты питания животного происхождения.

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## **ВВЕДЕНИЕ (PREFACE)**

Настоящее учебное пособие по английскому языку для студентов биотехнологического факультета состоит из 8 уроков, включающих в себя лексический материал, предусмотренный для данного курса и предназначенных для закрепления основного лексического и грамматического материала по курсу английского языка. Активный лексический и грамматический минимум определяется темами пособия. В пособие так же включены тексты по специальности, предназначенные для перевода. Упражнения направлены на развитие лексических навыков. В основу системы контрольных заданий данного пособия положены следующие методические принципы: упражнения даны в порядке нарастания языковых трудностей, устные упражнения чередуются с письменными. Материалом учебного пособия послужили оригинальные тексты англоязычных изданий. Сложность лексического материала предполагает его краткий лексический анализ, выявление в отдельных случаях подтекста, толкование в нем реалий, перевод текста на русский язык, обсуждение его содержания и некоторых особенностей языка.

Содержание учебного пособия направлено на повышение эффективности профессионально-ориентированного изучения иностранного языка и на совершенствование ранее приобретенных знаний. Пособие предназначено как для аудиторного, так и для самостоятельного изучения.

### **Общие сведения (overview)**

Учебно-методическое пособие составлено на основании:

1. Федерального государственного образовательного стандарта высшего образования по направлению подготовки 35.03.07 Технология производства и переработки сельскохозяйственной продукции, направленности Технология производства, хранения и переработки продукции животноводства, утвержденного приказом Министерства образования и науки от 4 декабря 2015 г. № 1431.

2. Приказа Министерства образования и науки Российской Федерации от 19 декабря 2013 г. № 1367 «Об утверждении Порядка организации и осуществления образовательной деятельности по

образовательным программам высшего образования – программам бакалавриата, программам специалитета, программам магистратуры».

3. Учебного плана прикладного бакалавриата по направлению 19.03.03 Продукты питания животного происхождения.

**Планируемые результаты обучения по дисциплине:**

В результате изучения дисциплины у студентов должны быть сформированы:

**знание:**

- грамматического и лексического минимума иностранного языка общего и профессионального характера.

**умения:**

- читать на иностранном языке литературу по специальности с целью поиска профессионально-значимой информации;  
- переводить тексты по специальности со словарем.

**навыки:**

- владения иностранным языком в объеме, необходимым для получения информации профессионального назначения.

**опыт деятельности:**

- организованного продуктивного партнерства в условиях коллективной коммуникации на иностранном языке;  
- определения средств и методов собственной учебно-познавательной учебной деятельности и саморефлексии;  
- работы с мировыми информационными ресурсами (поисковыми сайтами, страницами зарубежных вузов и профессиональных сообществ, электронными энциклопедиями).

Перечисленные результаты обучения по учебному курсу «Английский язык» и выполняемая самостоятельно контрольная работа направлены на формирование у студентов факультета заочного обучения следующих компетенций:

ОК- 5 - способностью к коммуникации в устной и письменной формах на русском и иностранном языках для решения задач межличностного и межкультурного взаимодействия

ОК- 7 - способностью к самоорганизации и самообразованию

Этапы формирования и критерии оценки уровня сформированности компетенций в процессе самостоятельного изучения дисциплины подробно описаны в рабочих программах дисциплин.

# Unit I

## Task 1. Read and translate the text:

### Agriculture

Agriculture is the production of food and goods through farming. 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, it also means the use of land to breed animals. At present there are two main branches of agriculture. They are crop growing and animal breeding. 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.

Agriculture was the key development that led to the rise of human civilization, with the husbandry of domesticated animals and plants (i.e. crops) creating food surpluses that enabled the development of more densely populated and stratified societies. The study of agriculture is known as agricultural science. Agriculture encompasses a wide variety of specialties and techniques, including ways to expand the lands suitable for plant raising, by digging water-channels and other forms of irrigation. Cultivation of crops on arable land and the pastoral herding of livestock on rangeland remain at the foundation of agriculture. In the past century there has been increasing concern to identify and quantify various forms of agriculture. In the developed world the range usually extends between sustainable agriculture (organic agriculture) and intensive farming (industrial agriculture).

Modern agronomy, plant breeding, pesticides and fertilizers, and technological improvements have sharply increased yields from cultivation, and at the same time have caused widespread ecological

damage and negative human health effects. Selective breeding and modern practices in animal husbandry such as intensive pig farming (and similar practices applied to the chicken) have similarly increased the output of meat, but have raised concerns about animal cruelty and the health effects of the antibiotics, growth hormones, and other chemicals commonly used in industrial meat production. The major agricultural products can be broadly grouped into foods, fibers, fuels, and raw materials. Specific foods include cereals, vegetables, fruits, and meat.

Fibers include cotton, wool, hemp, silk and flax. In 2010, about one third of the world's workers were employed in agriculture. The services sector has overtaken agriculture as the economic sector employing the most people worldwide. Despite the size of its workforce, agricultural production accounts for less than five percent of the gross world product (an aggregate of all gross domestic products).

**Task 2. Give English equivalents:** с\х, земля, земельные площади, выращивать, производить, необходимые материалы, животноводство, разводить животных, отрасль с\х, пригодный для ч.-л., с\х культура, запас, продукты питания, органическое с\х, индустриальное с\х, экологический ущерб, свиноводство, отрицательное влияние, производство мяса, продукты питания, полезные материалы, рабочая сила.

**Task 3. Find equivalents:** 1) land 2) raw materials 3) workforce 4) meat 5) fibers 6) growth hormones 7) pet 8) damage 9) food surpluses 10) agricultural products 11) breeding 12) meat production 13) output 14) pig farming 15) domesticated 16) sustainable agriculture 17) animals 18) goods 19) animal husbandry 20) branch

1) мясо 2) излишки продовольствия 3) выпуск продукции 4) отрасль 5) одомашненный 6) животные 7) животноводство 8) гормоны роста 9) зерновые культуры 10) волокна 11) разведение 12) органическое с\х 13) с\х продукты 14) производство мяса 15) сырье 16) повреждение, ущерб 17) домашнее животное, питомец 18) рабочая сила 19) свиноводство 20) земля.

**Task 4. Give Russian equivalents:** animal breeding, economic sector, worldwide, gross world product, raw materials, food surpluses, major agricultural products, technological improvements, useful materials, ecological damage, animal husbandry, growth hormones, chemicals, modern practices, major agricultural products, the key development, domesticated animals, a wide variety, production of food and goods, necessary materials, to breed animals.

**Task 5. Choose the right word.**

1. Agriculture is the production of food and goods through ...
  - a) cultivation b) development c) farming
- 2) Agriculture is a human activity in which people use areas of ... to produce food.
  - a) plant b) land c) animal
- 3) The word *agriculture* means the cultivation of fields and growing ...

- a) land b) soil c) crops
- 4) At present there are two main ... of agriculture.
  - a) fields b) surplus c) branches
- 5) The ... is the basis of agriculture.
  - a) field b) soil c) plant
- 6) Agriculture was the key ... that led to the rise of human civilization.
  - a) cultivation b) development c) improvement
- 7) The study of agriculture is known as agricultural ... .
  - a) science b) research c) learning
- 8) The major agricultural products can be broadly grouped into foods, fibers, fuels, and ... materials.
  - a) useful b) raw c) necessary
- 9) Technological improvements have sharply increased ... from cultivation.
  - a) yields b) plants c) crops

**Task 6. Comprehension check-up.**

1. What is agriculture?
2. What does the word “agriculture” mean?
3. What are the main branches of agriculture?

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4. What is the basis of agriculture?
5. What have sharply increased yields from cultivation?
6. What can the major agricultural products be broadly grouped into?
7. What does organic agriculture mean?

**Task 7. Choose key words (up to 10).**

**Task 8. Make a list of the most important points for you in the text.**

## Unit II

### Task 1. Read and translate the text:

#### TWO BRANCHES OF AGRICULTURE

There are two main branches of agricultural production – crop production and animal husbandry. Crop production is the practice of growing and harvesting crops. The most important crops grown by man are grain crops, vegetables and grasses. In order to obtain high yields crops are grown



under favorable soil and climatic conditions. Animal husbandry is a branch of agriculture including the breeding and raising of farm animals and their use. The branch of agriculture that deals with the feeding, caring and breeding of domestic animals is called animal husbandry. Animal husbandry refers to raising or keeping of livestock (domestic animals) for farm purposes, use or profit by selling the same.

Husbanding means to use a resource carefully and without waste. Thus, animal farming or animal husbandry requires planning for domestic animal's shelter, breeding, health, disease control and proper economic utilization. Our domestic animals or livestock includes those animals which are raised for farm purposes, eg. cattle (cow, bull or ox), buffalo, yak, horse, ass, goat, sheep, camel, etc.

As we all know that human population is increasing, so besides crop production, animal production is also to be increased to meet the demand for milk, meat and eggs. The animal based farming practices are undertaken by farmers along with agriculture as mixed farming. However, the progressive farmers take up one of these (animal farming practices) on commercial basis.

Dairy and beef cattle, hogs, sheep, and poultry are widely bred throughout the world. Farm animals are highly important sources of food for man. They are kept for the production of such nutritious products as meat, milk and eggs. Many crops grown by man are used in feeding livestock. At the same time manure produced by farm animals is an important source for the maintenance of soil fertility. Most of the nutrients taken by plants from the soil are thus returned. Applying manure, farmers improve the physical condition of the soil.

**Task 2. Give English equivalents:** животные, скот, КРС, животноводство, мясной скот, молочный скот, мясо, молоко, яйца, птица, разведение, кормление, отрасль, навоз, овцы.

**Task 3. Find equivalents:** 1) farm animals 2) animal husbandry 3) livestock 4) meat 5) eggs 6) breeding 7) feeding 8) cattle 9) dairy cattle 10) beef cattle 11) poultry 12) meat production 13) manure

1) мясо 2) кормление 3) скот 4) молочный скот 5) мясной скот 6) животные 7) животноводство 8) КРС 9) яйца 10) птица 11) разведение 12) производство мяса 13) с/х животные

**Task 4. Give Russian equivalents:** animal husbandry, branch, breeding, raising, farm animals, feeding, livestock, resource, disease control, cattle, milk, meat, eggs, dairy, beef cattle, hogs, sheep, poultry, feeding, manure.

### **Task 5. Comprehension check-up**

1. What are the two branches of agriculture? 2. What is crop production? 3. What are the main farm crops? 4. What does animal husbandry include? 5. What products do farm animals produce? 6. What is manure used for? 7. How do farmers improve the physical condition of the soil?

### **Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**

## **Unit III**

### **Task 1. Read and translate the text:**

#### **ANIMAL HUSBANDRY**

Animal husbandry comprises cattle-breeding, sheep-rearing, hog-growing, poultry-breeding, etc.

Cattle-breeding on a scientific scale is not only aimed at improving the breed, but also at increasing the head of cattle. The farm rearing many heifers and calves is a rich farm. The main problem in cattle-breeding is to choose the necessary feeds, rich enough in protein content and other nutrient substances. Special crops are grown for feeding cattle. They are mangle, alfalfa, clover, linseed, and some others.

As a rule dairy products (milk, butter, cream, sour cream) are processed on the farm. Big meat-packing plants are engaged in curing, smoking, corning and canning of meat.

Sheep are mainly bred for their meat. There are two types of sheep-breeding: for wool and for mutton. We can also speak about the wool-mutton breed.

Flocks grazing on well established pasturages, semi-deserts and even on dry grazing land supply people with wool, cheese, mutton.

Hog-breeding quickly yields returns and gives various foodstuffs derived from pork: bacon, lard, ham, sausage, tinned (canned) pork. Pig has a small stomach consuming food in concentrated form. The daily ration of a pig should be composed of feeds with a definite proportion of carbohydrates, proteins, vitamins and minerals.

Poultry-farming deals with breeding of domestic fowl: hens, geese,

ducks, turkeys. Poultry is bred for meat, feathers and eggs. The modern poultry industry producing eggs includes the use of specially bred birds, highly specialized feeds together with new housing and management techniques.

Animals, including horses, mules, oxen, camels, alpacas, and dogs, are often used to help cultivate fields, harvest crops, wrangle other animals, and transport farm products to buyers. Animal husbandry not only refers to the breeding and raising of animals for meat or to harvest animal products (like milk, eggs, or wool) on a continual basis, but also to the breeding and care of species for work and companionship. Livestock production systems can be defined based on feed source, as grassland - based, mixed, and landless. Grassland based livestock production relies upon plant material such as shrub land, rangeland, and pastures for feeding ruminant animals. Outside nutrient inputs may be used, however manure is returned directly to the grassland as a major nutrient source. This system is particularly important in areas where crop production is not feasible because of climate or soil, representing

30-40 million pastoralists. Mixed production systems use grassland, fodder crops and grain feed crops as feed for ruminant and monogastric (one stomach; mainly chickens and pigs) livestock. Manure is typically recycled in mixed systems as a fertilizer for crops. Approximately 68% of all agricultural land is permanent pastures used in the production of livestock. In the U.S., 70% of the grain grown is fed to animals on feedlots. Synthetic fertilizers are more heavily relied upon for crop production and manure utilization becomes a challenge as well as a source for pollution. Nutrient management includes both the source of nutrient inputs for crop and livestock production, and the method of utilization of manure produced by livestock. Nutrient inputs can be chemical inorganic fertilizers, manure, green manure, compost and mined minerals. Crop nutrient use may also be managed using cultural techniques such as crop rotation or a fallow period. Manure is used either by holding livestock where the feed crop is growing, such as in managed intensive rotational grazing, or by spreading either dry or liquid formulations of manure on cropland or pastures.

**Task 2. Give English equivalents:** порода, животные продукты, корма, молочные продукты, сыр, свинина, баранина, копчение, скотоводство, свиноводство, куры, утки, индейки.

**Task 3. Find equivalents:** 1) breed 2) animal products 3) pork 4) mutton 5) dairy products 6) poultry-breeding 7) flock 8) geese 9) cheese

10) canning

1) животные продукты 2) молочные продукты 3) гуси 4) стая 5) сыр 6) порода 7) консервирование 8) птицеводство 9) свинина 10) баранина

**Task 4. Give Russian equivalents:** cattle-breeding, hog-growing, poultry-breeding, breed, calves, feeds, dairy products, curing, smoking, corning, canning, wool, mutton, flock, cheese, animal products, foodstuffs, pork, hens, geese, ducks, turkeys.

**Task 5. Comprehension check-up.**

1). What does animal husbandry include? 2) What is cattle-breeding aimed at? 3) What are sheep bred for? 4) What does poultry-farming deal with? 5) What does hog-breeding deal with? 6) What does nutrient management include? 7) Where is manure used?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**

## Unit IV

### Task 1. Read and translate the text: HOW TO RAISE PIGS

#### Breeds

There are two main types of pigs: the pork type (for production of fresh meat) and the bacon type (for cured meat, bacon and ham). White-skinned breeds (Large White or Landrace) are susceptible to sun scald and hence not well suited to free range systems. The Berkshire, from Europe, produces a high quality carcass. Its black coat makes it more resistant to sun scald, hence more suited to extensive systems. Modern Berkshires are very distinctive with black coats and white markings. Sows are docile, good milkers and make good mothers if kept in reasonable breeding conditions. Tamworths resist sun scalding (due to their golden red colour) and are prolific breeders. Sows are good sucklers and docile with their young. The breed is suited to open air pens or paddock feeding conditions.

The Saddleback are black pigs with a white band over the shoulders. They are hardy, efficient grazers, able to make use of bulky fodders.

They produce good sized litters of a uniform type, and general high

quality.

## **Husbandry**

Three types of systems are used:

- Pasture
- Low- cost housing combined with pasture
- Intensive high cost housing (confinement) systems

Under pasture there is a need to rotate pasture, to stop buildup of parasites.

Intensive confinement systems are used where land prices are high, but this necessitates high input and control (control of pest, disease, feeding etc), and requires more sophisticated management skills. Pigs can be allowed to free range, but if they are, they can cause damage. As such they are best kept in a fenced area or a pen. Pigs do not jump, but they will burrow, so fencing needs to be solid. They can tolerate severe cold or wet, but need a dry, draught-free place to sleep.

Although pigs prefer the company of others, a sow needs isolation when she farrows.

Pigs may be used to control perennial weeds in a paddock between crops, in a fenced area at a stocking rate of 25 animals per hectare.

## **Feeding**

Pigs can adapt well to small or large properties. They are a very omnivorous animals, ie. they eat a very wide variety of foods - from virtually anything humans eat, through to grass, although grass alone is not a sufficient diet. In many ways, they are perhaps the cheapest source of meat to grow.

The following are suitable crops to grow as pig feed: Barley, corn, wheat, sorghum, carrots, turnips, parsnips, swedes, jerusalem artichokes, potatoes and silver beet. Pigs do need some protein, though, so foods such as these need to be supplemented with a protein supplement, such as skim or soya milk, meat meal, fish meal, cooked meat or fish, bean meal or high protein grains.

Sows in late pregnancy, and milking sows in particular, **MUST** have a good source of protein.

Pigs grown outdoors do not need mineral supplements, but if kept

indoors they could require mineral supplements.

Swill feeding is no longer used in some countries (e.g. In Australia it is illegal).

When fattening a pig, you can give them all they can eat until they reach around 45 kg, after which they should be restricted to what they can eat in 15 minutes.

Pigs need pasture rich in protein (the higher the better).

**Task 2. Give English equivalents:** свињи, сальный тип, мясной тип, туловище, свиноматка, супоросность, опорос, помет, загон, пастбище, добавки, источник, белок, кормление, корм, добавки, мясо.

**Task 3. Find equivalents:** 1) breed 2) pork type 3) bacon type 4) source 5) carcass 6) sow 7) litter 8) pen 9) supplements 10) protein canning

1) свиноматка 2) туловище 3) помет 4) загон 5) источник 6) порода 7) добавки 8) белок 9) сальный тип 10) мясной тип

**Task 4. Give Russian equivalents:** pork type, bacon type, cured meat, breeds, carcass, resistant, breeding conditions, sow, sucklers, grazers, litter, pasture, pen, properties, source, corn, wheat, carrots, potatoes, protein, fish meal, pregnancy, supplements.

**Task 5. Comprehension check-up.**

1) What are main types of pigs? 2) What types of systems are used? 3) Pigs are the cheapest source of meat, aren't they? 4) Are pigs omnivorous or herbivorous animals? 5) What are suitable crops to grow as pig feed? 6) What supplements do pigs need?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**

## Unit V

**Task 1. Read and translate the text:**

### PORK PRODUCTION

Environmental challenges with larger amounts of manure concentrated in a Pork is the most widely consumed meat in the world. People eat many different pork products, such as bacon, sausage, pork

chops and ham. Modern pork production is mostly done in enclosed buildings to protect animals from the weather, from predators and from the spread of diseases. While larger operations enabled farmers to significantly increase the efficiency of production using less labor, it resulted in small area. A 250-pound market hog yields about 150 pounds of pork.

Several valuable products or by-products, in addition to meat, come from swine. These include insulin for the regulation of diabetes; valves for human heart surgery; suede for shoes and clothing; and gelatin for many food and non-food uses. Swine by-products are also important parts of such products as water filters, insulation, rubber, antifreeze, certain plastics, floor waxes, crayons, chalk, adhesives and fertilizer. The phases of pork production that take place on the farm to produce hogs ready for market are called: breeding-gestation, farrowing, nursery and grow-finish.

Swine production can be logically separated into a number of phases, beginning with the sow being bred. Historically, this has been done by placing a number of sows in a pen with one or more boars. In confinement buildings, boars are often rotated between sow pens to make sure that all sows are bred while they were in heat. Sows in enclosed shelters come into estrous, 3 until 5 days after their pigs are weaned. The estrous period, or standing heat, is the period when the sow can be bred. Estrous only lasts a short time, so it is critical that the sow is bred at this time. During estrous, the sow shows outward signs of being willing to accept the boar, such as standing still when the producer applies downward pressure on her back or holding her ears erect. If the sow is not bred during this period, she normally returns to estrous about 21 days later. These two periods are known as "first heat breeding" and "second heat breeding". The non-pregnant sow is considered "unproductive" during this 3-week period, since she still must be fed and housed. Most modern operations have sows bred only on first heat. Sows that fail to breed during this estrous are often sent to market and replaced in the sow herd by gilts, or young females that are removed from the grow-finish group of pigs. After breeding, the sow "gestates" her "litter" for 113 to 116 days before the pigs are born or "farrowed." A good way to remember gestation length for swine is that it is approximately "3 months, 3 weeks and 3 days".

Just before giving birth, called farrowing, sows are normally moved into a "farrowing room." Sows typically farrow from eight to twelve piglets, which as a group are called a litter. Most confinement

operations place the sow in a temperature-controlled environment and usually in a farrowing pen or crate which restricts her movement to protect her baby pigs. The baby pigs spend most of their time in a "creep area on one or both sides of the crate where they have ready access to their mother, but are protected from crushing when she lies down. An average sow will raise three to five litters of pigs in her lifetime. Sows may be culled and sent to market, because of age, health problems, failure to conceive, or if they are able to raise only a low number of pigs per litter.

Pigs are born with eight needle-sharp teeth and curly tails. The tips of the teeth are clipped at birth to prevent injury to the sow's udder and other piglets and the tail is shortened to prevent tail biting. Piglets weigh about three pounds at birth and are weaned from the sow at anywhere from five days to four weeks, with most operations weaning pigs at two to three weeks.

After weaning, pigs are normally placed in a "nursery" where they are kept in a temperature-controlled environment, usually on slotted floors. The floors in a nursery are usually constructed from plastic or plastic covered steel instead of concrete to provide additional comfort for the small pigs. Pigs are normally given around three square feet of space each and provided with ready access to water and feed. Nursery pens are sometimes elevated, with their slotted floor above the room floor level 8 to 12 inches. This is done to minimize the possibility of cold floor drafts chilling the young pigs. Immediately after weaning, the temperature in the nursery may be as much as 85 degrees, and then dropped gradually to about 70 degrees as the pigs grow. Pigs are normally removed from the nursery at about 6 to 10 weeks of age and placed in a "grow-finishing" building. Nursery rooms are almost always heated with furnaces and ventilated with mechanical fans, controlled by a thermostat, in order to keep the pigs warm and dry throughout the year. This phase is where pigs are fed as much as they wish to eat until they reach market weight of 250 to 275 pounds and provided around 8 sq. ft. of space per pig. Marketing normally occurs at five to six months of age, depending on genetics and any disease problems encountered. Some gilts are returned from the grow-finish phase to the sow herd for breeding purposes, to replace older sows that are culled.

Animals in a grow-finish operation are larger and produce a great deal of body heat. Ventilation to keep the animals cool is usually more of a



concern than providing heat in winter. Animals at this age grow best at around 60-70 degrees. In winter, they are protected from winter winds in a moderately well insulated building. Enough ventilation must be provided to remove moisture and to provide fresh air for the animals. In summer, large sidewall vents are opened or large ventilation fans are operated to keep the animals comfortable. This is referred to, respectively, as naturally ventilated (air change due to the wind) or mechanically ventilated (where air is drawn into the buildings through vents due to a negative pressure created with wall fans that exhaust inside air).

**Task 2. Give English equivalents:** боров, свиноматка, поросята, помет, период охоты, опорос, отъем, выращивание, сбыт, вес.

**Task 3. Find equivalents:** 1) pork products, 2) boar 3) piglets 4) farrowing 5) bacon 6) sow 7) litter 8) estrous period 9) weaning 10) spread

1) свиноматка 2) боров 3) помет 4) поросята 5) период охоты 6) сало, бекон 7) опорос 8) отъем 9) распространение 10) продукты из свинины

**Task 4. Give Russian equivalents:** bacon, sausage, pork chops, ham, pork products, spread, by-products, estrous period, farrowing, nursery, sow, boar, piglets, litter, weaning.

**Task 5. Comprehension check-up.** 1) Pork is the most widely consumed meat in the world, isn't it? 2) What products or by-products, in addition to meat, come from swine? 3) What are the phases of pork production? 4) What is called the estrous period? 5) What is called a litter? 6) When do marketing normally occur?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**

## Unit VI

**Task 1. Read and translate the text:**

### **Meat & Meat Products (Part I)**

Meat is the most valuable livestock product. Meat is composed of protein and amino acids, minerals, fats and fatty acids, vitamins and other bioactive components, and small quantities of carbohydrates. From the nutritional point of view, meat's importance is derived from its high

quality protein, containing all essential amino acids and it's highly bioavailable minerals and vitamins. Meat is rich in Vitamin B12 and iron which are not readily available in vegetarian diets.

While meat consumption has been relatively static in the developed world, annual per capita consumption of meat has doubled since 1980 in developing countries. Growing population and incomes, along with changing food preferences are increasing the demand for livestock products.

World meat production is projected to double by 2050, most of which is expected in developing countries. The growing meat market provides a significant opportunity for livestock farmers and meat processors in these countries. Nevertheless, increasing livestock production and the safe processing and marketing of hygienic meat and meat products represents a big challenge.

Meat can be part of a balanced diet contributing valuable nutrients that are beneficial to health. Meat and meat products contain important levels of protein, vitamins, minerals and micronutrients which are essential for growth and development. Further processing of meat offers the opportunity to add value, reduce prices, improve food safety and extend the shelf-life. This can result in increased household income and improved nutrition. While the per caput consumption of meat in some industrialized countries is high, per caput consumption below 10 kg in developing countries must be considered insufficient and often leads to under-nourishment and malnutrition. It is also estimated that more than 2 billion people in the world are deficient in key vitamins and minerals, particularly vitamin A, iodine, iron and zinc. Deficiencies occur when people have limited access to micronutrient-rich foods such as meat, fish, fruit and vegetables. Most people with micronutrient deficiencies live in low income countries and are typically deficient in more than one micronutrient. Highly nutritious foods such as meat are particularly required for HIV AIDS infected communities and also for women and children.

To effectively combat such malnutrition and under-nourishment, 20 g of animal protein per person per day or 7.3 kg per year should be provided. This can be achieved by an annual consumption of 33 kg lean meat or 45 kg fish or 60 kg eggs or 230 kg milk, respectively. These sources are usually combined in the daily food intake, but in regions where not all of them are readily available, intake of the others needs to be increased.

Although nutrients from animals may be of higher quality or more readily absorbed than vegetable sources, it is possible to have a healthy vegetarian diet.

The steadily growing world population and increasing incomes creates higher demand for meat, but at the same time leaves limited space for expansion in livestock production. Therefore the maximum utilization of existing food resources becomes even more important. Poultry meat is of growing importance to meet this demand.

**Task 2. Give English equivalents:** мясо, свиноматка, белок, жиры, жирные кислоты, углеводы, минералы, витамины, аминокислоты, биоактивные компоненты, необходимый, ценный, добавки, питательные вещества, потребление, спрос, сбалансированный рацион.

**Task 3. Find equivalents:** 1) nutrients 2) protein 3) essential 4) utilization 5) demand 6) carbohydrates 7) consumption 8) processing 9) supplements 10) amino acids 11) balanced diet 12) valuable

1) спрос 2) необходимый 3) ценный 4) использование 5) потребление 6) углеводы 7) добавки 8) белок 9) переработка 10) сбалансированный рацион 11) добавки 12) аминокислоты

**Task 4. Give Russian equivalents:** livestock product, meat, protein, amino acids, minerals, fats and fatty acids, vitamins, bioactive components, carbohydrates, consumption, nutrients, essential, valuable, balanced diet, source, demand for meat, nutrients, under-nourishment, malnutrition, quality, insufficient, healthy.

**Task 5. Comprehension check-up** 1) What is meat? 2) What is meat composed of? 3) What is meat's importance derived from? 4) What does the growing meat market provide? 5) What vitamins is meat rich in? 6) Is it possible to have a healthy vegetarian diet?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**

## Unit VII

**Task 1. Read and translate the text:**

### **Meat & Meat Products (Part II)**

The most common sources of meat are domesticated animal species such as cattle, pigs and poultry and to a lesser extent buffaloes, sheep and

goats. In some regions other animal species such as camels, yaks, horses, ostriches and game animals are also eaten as meat. To a limited extent, meat is also derived from exotic animals such as crocodiles, snakes and lizards.

For thousands of years, poultry supplied meat and eggs, cattle, sheep and goats provided meat and milk, and pigs provided a source of meat. These species are the main sources of animal protein for humans. The meat derived from cattle is known as beef, meat derived from pigs as pork and from chickens as poultry. Pork is the most widely eaten meat in the world accounting for over 36% of the world meat intake. It is followed by poultry and beef with about 35% and 22% respectively.

The quality of animals slaughtered has a big effect on the standard of meat produced. The most important factors are feeding, age, genetics and health status. Efforts have been made to improve meat production and quality by breeding, or to combine the key characteristics by means of crossbreeding. New breeds with improved meat quality and carcass yields and adapted disease resistance can make a significant contribution to improved meat availability for human nutrition. Typical cattle breeds originating from Asia are Brahman and Gyr. These breeds and their crosses are common in most tropical countries around the world. Angus, Charolais, Hereford, Limousin and Simmental are typical European breeds. Also the increasingly popular Japanese Wagyu is a cross of native cattle and European inputs.

Most authorities have considered that the origins of the domestic chicken (*Gallus domesticus*) were the Red Jungle Fowl of Asia. The present day chickens are larger and more productive than the ancestral Red Jungle Fowl with four basic types: 1) egg type, or Mediterranean; (2) game; (3) meat type; and (4) Bantam. Within these types, there are an estimated 1233 different breeds of chicken that are recognized. Most commercial broilers are hybrid chickens.

A huge number of native pig breeds exist around the world and are well adapted to local conditions. Typical commercial pig breeds are the various landraces (Danish, German, Dutch, Italian, etc.) and the Large Whites in Europe, often crossed with the Pietrain race from Belgium. In Asia, the Beijing Black and the Jinhua pig from China and the Mong Cai from Vietnam are common. Most commercial pigs are crosses or hybrids.

**Task 2. Comprehension check-up.** 1) What are the most common sources of meat? 2) Is meat also derived from exotic animals? 3) What

kinds of them? 4) What kinds of meat can you name? 5) What has a big effect on the standard of meat produced? 6) What are the most important factors? 7) What can make a significant contribution to improved meat availability for human nutrition?

**Task 3. Choose key words (up to 10)**

**Task 4. Make a list of the most important points for you in the text**

## **Unit VIII**

**Task 1. Read and translate the text:**

### **ADDITIVES**

When meat is industrially processed in preparation of consumption, it may be enriched with additives to protect or modify its flavor or color, to improve its tenderness, juiciness or cohesiveness, or to aid with its preservation. Meat additives include the following:

- Salt is the most frequently used additive in meat processing. It imparts flavor but also inhibits microbial growth, extends the product's shelf life and helps emulsifying finely processed products, such as sausages. Ready-to-eat meat products normally contain about 1.5 to 2.5 percent salt.

- Nitrite is used in curing meat to stabilize the meat's color and flavor, and inhibits the growth of spore-forming microorganisms such as *C. botulinum*. The use of nitrite's precursor nitrate is now limited to a few products such as dry sausage, prosciutto or parma ham.

- Phosphates used in meat processing are normally alkaline polyphosphates such as sodium tripolyphosphate. They are used to increase the water-binding and emulsifying ability of meat proteins, but also limit lipid oxidation and flavor loss, and reduce microbial growth.

- Erythorbate or its equivalent ascorbic acid (vitamin C) is used to stabilize the color of cured meat.

- Sweeteners such as sugar or corn syrup impart a sweet flavor, bind water and assist surface browning during cooking in the Maillard reaction.

- Seasonings impart or modify flavor. They include spices or oleoresins extracted from them, herbs, vegetables and essential oils.

- Flavorings such as monosodium glutamate impart or strengthen a particular flavor.
- Tenderizers break down collagens to make the meat more palatable for consumption. They include proteolytic enzymes, acids, salt and phosphate.
- Dedicated antimicrobials include lactic, citric and acetic acid, sodium diacetate, acidified sodium chloride or calcium sulfate, cetylpyridinium chloride, activated lactoferrin, sodium or potassium lactate, or bacteriocins such as nisin.
- Antioxidants include a wide range of chemicals that limit lipid oxidation, which creates an undesirable "off flavor", in precooked meat products.
- Acidifiers, most often lactic or citric acid, can impart a tangy or tart flavor note, extend shelf-life, tenderize fresh meat or help with protein denaturation and moisture release in dried meat. They substitute for the process of natural fermentation that acidifies some meat products such as hard salami or prosciutto.

**Task 2. Give English equivalents:** мясо, переработка, потребление, добавки, соль, специи, нитрат, антиоксиданты, подсластители, улучшители вкуса, травы, растительное масло, кислоты, вкус, сочность, мягкость, сохранение, химические вещества.

**Task 3. Find equivalents:** 1) additives 2) to modify 3) flavor 4) to improve 5) color 6) tenderness 7) juiciness 8) to inhibit 9) shelf life 10) spices

1) улучшать 2) подавлять, тормозить 3) добавки 4) специи 5) срок годности 6) мягкость 7) вкус 8) цвет 9) изменять 10) сочность

**Task 4. Give Russian equivalents:** meat processing, consumption, to enrich with, additives, to protect, to modify, flavor, color, to improve, tenderness, juiciness, cohesiveness, preservation, to inhibit, microbial growth, shelf life, ready-to-eat meat products, salt, spices, nitrate, herbs, vegetable oil, acids, antioxidants.

**Task 5. Comprehension check-up.** 1) What meat may be enriched with? 2) What do meat additives include? 3) What is salt used for? 4) What is nitrite used for? 5) What is sweeteners used for? 6) What is seasonings used for? 7) What is tenderizers used for? 8) What is

antioxidants used for? 9) What is flavorings used for? 10) What is acidifiers used for?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text.**

## **Unit IX**

### **Task 1. Read and translate the text: SPOILAGE AND PRESERVATION**

The spoilage of meat occurs, if untreated, in a matter of hours or days and results in the meat becoming unappetizing, poisonous or infectious. Spoilage is caused by the practically unavoidable infection and subsequent decomposition of meat by bacteria and fungi, which are borne by the animal itself, by the people handling the meat, and by their implements. Meat can be kept edible for a much longer time – though not indefinitely – if proper hygiene is observed during production and processing, and if appropriate food safety, food preservation and food storage procedures are applied. Without the application of preservatives and stabilizers, the fats in meat may also begin to rapidly decompose after cooking or processing, leading to an objectionable taste known as warmed over flavor.

Fresh meat can be cooked for immediate consumption, or be processed, that is, treated for longer-temperature reservation and later consumption, possibly after further preparation. Fresh meat cuts or processed cuts may produce iridescence, commonly thought to be due to spoilage but actually caused structural coloration and diffraction of the light. A common additive to processed meats, both for preservation and because it prevents discoloring, is sodium nitrite, which, however, is also a source of health concerns, because it may form carcinogenic nitrosamines when heated.

Meat is prepared in many ways, as steaks, in stews, fondue, or as dried meat like beef jerky. It may be ground then formed into patties (as hamburgers or croquettes), loaves, or sausages, or used in loose form. Home meat is cured by smoking, which is the process of flavoring, cooking, or preserving food by exposing it to the smoke from burning or smoldering plant materials, most often wood. In Europe, alder is the traditional smoking wood, but oak is more often used now, and beech to a lesser extent. In North

America, hickory, mesquite, oak, pecan, alder, maple, and fruit-tree woods are commonly used for smoking. Meat can also be cured by pickling, preserving in salt or brine (see salted meat and other curing methods). Other kinds of meat are marinated and barbecued, or simply boiled, roasted, or fried.

Meat is generally eaten cooked, but many recipes call for raw beef, veal or fish (tartare). Steak tartare is a meat dish made from finely chopped or minced raw beef or horse meat. Meat is often spiced or seasoned, particularly with meat products such as sausages. Meat dishes are usually described by their source (animal and part of body) and method of preparation (e.g., a beef rib).

Meat is a typical base for making sandwiches. Popular varieties of sandwich meat include ham, pork, salami and other sausages, and beef, such as steak, roast beef, corned beef, pepperoni, and pastrami. Meat can also be molded or pressed (common for products that include offal, such as haggis and scrapple) and canned.

**Task 2. Give English equivalents:** мясные блюда, приготовление, варить, жарить, говядина, телятина, рыба, съедобный, свежий, гигиена, пищевая безопасность, ядовитый, инфекционный, грибки, бактерии, переработка, сырой, разложение, мясные продукты.

**Task 3. Find equivalents:** 1) edible 2) fresh 3) recipe 4) beef 5) cooking 6) food safety 7) to boil 8) to roast 9) hygiene 10) poisonous

1) рецепт 2) приготовление 3) гигиена 4) пищевая безопасность 5) ядовитый 6) варить 7) жарить 8) свежий 9) съедобный 10) говядина

**Task 4. Give Russian equivalents:** spoilage, poisonous, infectious, decomposition, bacteria, fungi, implements, edible, hygiene, food safety, procedures, preservatives, stabilizers, cooking, processing, fresh, meat cuts, to boil, to roast, to fry, recipe, raw, beef, veal, fish, meat dishes.

**Task 5. Comprehension check-up.** 1) What does the spoilage of meat result in? 2) What is the spoilage caused by? 3) How can meat be kept edible for long time? 4) What is the commonest additive to processed meats? 5) What are the ways of meat cooking?

**Task 6. Choose key words (up to 10)**

**Task 7. Make a list of the most important points for you in the text**



# Unit X

## Salmon, Pacific

### 1. Vocabulary:

genus	- род
anadromous	- анадромный, мигрирующий
salmon[	-лосось европейский, семга
char	-(зоол.)голец
trout	-форель
spawn	-икра, метать икру, плодиться, 25 размножаться
redd	-расчищать, яма
gravel	-песок, галька
male	-самец
cover	-сидеть (на яйцах)
fry	-мальки, молодь
set out	-отправиться
troll	-ловить рыбу на блесну
gill	-ловить рыбу жаберными сетями
net	-ловить рыбу сетями
seine	-ловить рыбу неводом
purse	-мотня (в неводе)
trap	-капкан
yearling	-годовалый
sockeye=kokanee=nerka	
avg.=average	
plant	-пускать (в водоем)

### 2. Give the Russian for:

### Give the English

#### for:

several species of trout	выпущенная (в водоем) рыба
pacific salmon	высиживать
arctic char	несколько видов форели
anadromous fish	довольно высокий
spawn	плодиться, размножаться

deposit eggs	ТИХООКЕАНСКИЙ ЛОСОСЬ
develop slowly	ВЫЖИВАЕМОСТЬ
young fry	АВЕРШИТЬ СВОЙ ЖИЗНЕННЫЙ ЦИКЛ
survival rate	АРКТИЧЕСКИЙ ГОЛЕЦ
average weight	ГОРБУША
length of life cycle	МИГРИРУЮЩАЯ РЫБА
trolling	С ИСПОЛЬЗОВАНИЕМ КАПКАНОВ
gill netting	МЕДЛЕННО РАЗВИВАТЬСЯ
seining	ДЛИТЕЛЬНОСТЬ ЖИЗНЕННОГО ЦИКЛА
by use of traps	ЛОВЛЯ РЫБЫ НЕВОДОМ
pink Salmon	МАЛЬКИ, МОЛОДЬ
planted fish	СРЕДНИЙ ВЕС
cover	ЛОВЛЯ РЫБЫ СЕТЯМИ
quite high	ПОМЕЩАТЬ
complete one's life cycle	ЛОВЛЯ РЫБЫ НА БЛЕСНУ

## **Salmon, Pacific**

Salmon belong to the family Salmonidae which includes all members of the genus *Salmo* (Atlantic salmon, Pacific steelhead, Arctic char, and several species of trout) and the true Pacific salmon of the genus *Oncorhynchus*. This genus embraces six distinct species and is of considerable anadromous fish that spent their adult lives at sea and migrate to fresh water streams, there to spawn and die. They all have similar life histories in that they return in late summer or late autumn to their parent streams where, sometimes after migrating hundreds of miles, the female digs a deep red in the gravel bed in which she deposits her eggs. These are fertilized by the male and covered. The eggs develop slowly, the yolk sacs are absorbed and the young fry emerge from the gravel in the very early spring. While the young fry of some species proceed downstream to the sea almost immediately, others live 1-2 yr in the lakes or streams before setting out on their downstream migration. The survival rate from the eggs to the returning adult salmon is only 0.1-0.3%. Some 500,000 metric tons of salmon are caught annually by ( in order of size of catch) Japan, United States, Russia, and Canada.

The following records the names of the 6 species of Pacific salmon together with their average and extreme weight and the length of their life cycles in years. Sockeye (nerka) : 5-7 and up to 15 lb; 4-5, occasionally 3, 6 or 7 years. Pink (gorbusha): 3-5 and up to 10 lb; 2 yr. Coho (kisutsh) : 6-12

and up to 32 lb; 3 and occasionally 2 and 4 yr. Chinook or Spring (tschawytscha) : 10-50 and up to 126 lb; 4-5 and occasionally 2, 6 or 7 yr. Chum (keta) : 8-18 and up to 33 lb; 3-4 yr. Masu (occurs only in Japan) : avg 10 and up to 20 lb.

Salmon are fished commercially by trolling, gill, netting, purse seining and, where permitted, by use of traps. The method of fishing depends on species, type of market, and season. Sports fishermen catch comparatively large numbers of salmon by trolling using various lures and by mooching. They usually fish for coho or chinook salmon but on occasion catch sockeye or pink salmon.

Oncorhynchus species in some cases complete their life cycle in fresh water. Thus small sockeye salmon which are usually only 1/2 -2 lb in weight, and are called kokanee, spawn in streams and complete their adult life in lakes. About 6 yr ago yearling coho and chinook salmon were planted in Lake Michigan. The survival rate of the planted fish was quite high. In 1968, about 91, 000 coho were caught in Lake Michigan and 12,000 in Lake Superior. It is unfortunate that these fish have been exposed to quite high concentrations of DDT.

**3. Translate the sentences into Russian paying attention to the peculiarities of noun chain translation. Underline noun chains.**

1) These organizations study the distribution of salmon stocks in the ocean, the maintenance of natural spawning grounds, and the establishment of artificial spawning channels.

2) Fish collected from gill net boats and those fished by purse seiners, were frequently iced.

**4. Find the words with the following suffixes –tion, -th, -ic, -al, -ly, -ance, -ous in the text and arrange them into 3 groups (nouns, adjectives, adverbs).**

**5. Form compound nouns by joining a word in the first column with a word in the second one and find them in the text.**

steel	stream
down	man
fisher	head

**6. Find out grammar functions.**

are fished	depends on
were planted	planted fish
was	have been exposed

**7. Find 2 sentences with the turn of speech THERE BE in the text**

**and translate them into Russian paying attention to the peculiarities of such sentence translation.**

**8. Find the predicates in the following sentences and identify them:**

1) Fish collected from gill net boats were frequently iced.

2) The canning of salmon is a procedure which has not altered radically since its inception about 1864-1867.

3) Fish are processed soon after they reach the plant.

4) Spawning channels have been made on the effect of power dams on river migrations and on spawning grounds.

**9. In the text find the sentences where Passive Voice is used and translate them into Russian.**

## **Unit XI**

### **Salmon, Pacific (text 2)**

#### **1. Vocabulary:**

spawning-	нерест
maintain-	сохранять
stock-	род, запас
power dam-	механизированная дамба
spawning ground-	нерестилище
a stock of fish-	рыбность, заселенность рыбой
incompatible-	несовместимый, несочетающийся
decimate-	уничтожать, опустошать,
истреблять	
fry-	мальки, молодь
school-	косяк рыбы
olfactory senses-	органы обоняния
eviscerate-	потрошить
chill-	замораживать
viscera-	внутренности
trigger-	побуждать

**2. Match the words and phrases from the first column with the ones in the second column.**

to regulate the harvesting of salmon	кишечная полость
costal waters	искусственный
natural spawning grounds	прибрежные воды
artificial	исследование
power dam	уничтожать, истреблять
investigation	регулировать улов лосося
establishment of artificial spawning	пищеварительный
channels	
decimate	природные нерестилища
school	отлов
yearling	механизированная дамба
newly emerged fry	косяк (рыбы)
to arrive at one's destination	распределение,
	распространение
sensitive	плодиться, размножаться
preservation	создание искусственных
	нерестилищ
distribution	хранение
processing	консервирование
storage	годовалый
canning	переработка
capture	мальки
digestive	сохранение
visceral cavity	чувствительный
spawn	прибывать к месту
	назначения

## **Salmon Pacific**

In order to maintain and if possible increase salmon stocks, active research has been conducted for many decades by organizations in Japan and Russia. Among them, these organizations carry out important work such as regulating the harvesting of salmon on the high seas, in coastal waters, and in rivers. They also study the distribution of salmon stocks in the ocean, the maintenance of natural spawning grounds, and the establishment of artificial spawning channels. They have played a prominent role in investigations that have been made on the effect of power dams on river migrations and on spawning grounds. The conclusion has been that power dams and good stocks of salmon are incompatible. Without the dedicated efforts of these organizations salmon stocks might

long ago have been decimated. It is hoped that this great fish resource will be maintained and even expanded.

The migrations of salmon are fascinating and are, as yet, largely unsolved problems. The downstream migration involves, depending on the species, newly emerged fry, yearlings, or large 2-yr-old fish. They swim downstream, usually in schools, resting on occasion until they reach salt water and the active search for food commences. What triggers these migrations is not known though a rise in water temperature to about 40 F is definitely stimulatory. The means by which adult salmon, often hundreds of miles from shore, are attracted to their parent streams are still not clear, though some investigators believe that visual stimuli are responsible. On the other hand, salmon possess very sensitive olfactory senses and chemical stimuli may well be involved. Once the fish reach the immediate location of their home stream, research has shown that olfactory stimuli are all-important. As yet, attempts to identify the substance that exerts the attractant effect have met with only limited success. It would appear probable that a number of chemical attractants are involved since within one river system there usually exist different spawning grounds each with its race of fish which arrives at its destination with chronological regularity.

The transportation, preservation, processing, storage, and distribution of salmon is complex. Where processing plants are near fishing grounds and the fish are intended for canning they are rarely eviscerated or iced and are processed soon after they reach the plant. Since fish used for canning are not eviscerated they must be chilled if there is an interval of some days between capture and processing. For this reason fish collected from gill net boats, and those fished by purse seiners, were frequently iced. However, due to the quantities of fish involved the icing was often inadequate and the visceral cavities and surrounding tissues were attacked by digestive enzymes with resulting discoloration and softening.

### **3. Translate chains of nouns:**

gill netting

purse seining

sports fisherman

life cycle

**4. Find the words with the following suffixes –tion, -ment, -al, -ent, -sion, -ible, -ly, -ture, -or, -ive, -ant, -able, -ity, -age, -en in the text and arrange them into 4 groups (nouns, adjectives, adverbs, verbs).**

### **5. Find out grammar functions:**

has been conducted

have played

might have been decimated

is hoped

will be maintained                      unsolved problem  
may be involved                          has shown

**6. Write out the sentences with modal verbs from the text and translate them into Russian.**

**7. Translate the sentences into Russian paying attention to the use of tenses. Identify Tense and Voice of the predicates.**

- 1) This genus embraces six distinct species.
  - 2) Salmon are fished commercially by trolling.
  - 3) About 6 years ago yearling soho and chinook were planted in Lake Michigan.
  - 4) Adult fish returned for spawning, particularly in Lake Michigan.
  - 5) Sports fishermen catch comparatively large number of salmon by trolling.
  - 6) These fish have been exposed to quite high concentrations of DDT.
  - 7) The survival rate of the planted fish was quite high.
- Coho= kisutsh, chinook= tschawytscha

## Unit XII

### Salmon, Pacific. Salmonella contamination.

#### 1. Vocabulary:

chill-	замораживать
fork (pugh)-	кидать, поднимать вилами
brail	(мор.) брать на гитовы
convey-	перевозить, передавать
divert fish to the outlets-	направить рыбу на другие
рынки	
coho=kisutch	
chinook= tschawytscha	
eviscerate-	потрошить
oxidative rancidity-	окислительное протухание
steak-	кусок
inception-	начало
retort-	перегонять в реторте

sockey=nerka

cham= keta

fin-

плавник

viscera-

внутренности

**2. Match the words and phrases from the first column with the ones in the second column.**

landed salmon

разгружать

unload

заражение

vessel

внутренности

troll-caught salmon

судно, корабль

considerable quantity

упростить процесс

frozen salmon steaks

лосось, выловленный на блесну

minimize the contact of oxygen

тифозная лихорадка

with the fish

simplify the process

выловленный лосось

viscera

минимизировать доступ кислорода к рыбе

contamination

патогенные микробы, вызывающие диарею

typhoid fever

значительное количество

diarrhea-causing pathogens

замороженные куски лосося

## **Salmon, Pacific. Salmonella Contamination**

There has been much improvement in quality of landed salmon as a result of the application of the refrigerated sea water procedure whereby the fish are promptly placed in sea water chilled by mechanical means or by ice and held at about 30 F until they are unloaded. Where salmon were at one time unloaded by forking (pughing) or perhaps by brailing there is an increasing tendency to use sophisticated mechanical unloaders which convey the fish from vessel to fish plant in a stream of water at the rate of perhaps 1-2 thousand pounds per minute without damage. Refrigerated sea water transportation of salmon has enabled processors to divert more fish to outlets such as the fresh fish market where the financial rewards are greater. Troll-caught salmon, which are usually coho and chinook, are almost invariably eviscerated and iced since they command comparatively high prices.

A considerable quantity of salmon is frozen and, due to the oily nature of the fish, development of oxidative rancidity may be a serious problem. Salmon are usually frozen whole and glazed with ice which may contain an antioxidant or substances which prevent cracking. Frozen salmon steaks or fillets should not be stored except for short periods at



very low temperatures (e. g.,-28 to-30 F) and preferably under conditions which minimize the contact of oxygen with the fish.

The canning of salmon is a procedure which has not altered radically since its inception about 1864-1867. Most sockeye, pink, and chum salmon are canned, and coho and chinook much less frequently. Since the early days, the process has been simplified by the introduction of a number of machines. These include the iron chink which rapidly removes heads, tails, fins, and viscera. Automatic filling machines are used as well as devices for salt addition. Color sorting can now be carried out. After checks for appearance and weight, the cans are sealed using a vacuum closing machine, are retorted at about 245 F, and cooled.

### **Salmonella contamination**

The incidence of salmonellosis in the United States in 1971 has been estimated at two million cases of clinical illnesses. These cases have resulted almost entirely from eating contaminated food. The salmonellae, a group of diarrhea-causing pathogens with about 1500 recognizably different serotypes, are among the most versatile of the microorganisms producing food-borne infections. They cause a variety of illnesses ranging from typhoid and paratyphoid fevers to meningitis, endocarditis, septicemia, osteomyelitis, and arthritis in addition to their most frequent manifestation, gastroenteritis. That the reported cases of salmonellosis are increasing on a worldwide basis when many other bacterial diseases are receding in the face of technology is an anachronism. Salmonellosis, in fact, has become largely a man-made disease resulting from an ever-increasing variety of host products.

### **3. Translate the following sentences into Russian paying attention to the peculiarities of nouns chains translation.**

1) These organizations study the distribution of salmon stocks in the ocean, the maintenance of natural spawning grounds, and the establishment of artificial spawning channels.

2) Fish collected from gill net boats, and those fished by purse seiners, were frequently iced.

### **4. Translate chains of nouns:**

river migrations

power dams

great fish resource  
home stream  
fishing grounds

salt water  
processing plant

### 5. Find out grammar forms:

landed salmon  
may contain  
is frozen  
has been simplified  
have resulted  
are increasing  
were unloaded

are eviscerated  
has not altered  
should not be stored  
using a vacuum closing machine  
diarrhea-causing pathogens  
water chilled by ice

### 6. Give 3 forms of the following verbs:

spent	known	met
caught	study	reach
made	shown	been
use	believe	held
were	eat	become

### 7. Translate the sentences into Russian paying attention to the use of Tenses and Voices.

- 1) In order to increase salmon stocks, active research has been conducted for many decades.
- 2) It is hoped that this great fish resource will be maintained.
- 3) Spawning channels have played a prominent role in investigations.
- 4) Fish arrives at its destination with chronological regularity.
- 5) Due to the quantities of fish involved the icing was often inadequate and the visceral cavities were attacked by digestive enzymes.
- 6) The means by which adult salmon, often hundreds of miles from shore, are attracted to their parent stream are still not clear, but some investigators believe that visual stimuli are responsible.

### 8. Find out the functions of the participles.

- 1) Salmon swim downstream resting on occasion until they reach salt water.
- 2) The survival rate of the planted fish was quite high.
- 3) Where processing plants are near fishing grounds the fish are processed soon after they reach the plant.
- 4) There is an increasing tendency to use sophisticated mechanical

unloaders.

5) The migrations of salmon are largely unsolved problems.

**9. Write out 3 sentences with modal verbs from the text and translate them.**

**10. Put the question to the every paragraph so that to express the main idea of it.**

**11. In 3 texts find the words with the following affixes: un-, in-, re-, dis-. Pay attention to the meaning of the affixes (e.g. over (слишком много) etc. Translate the words.**

## Unit XIII

### Sardines of Norway

#### 1. Vocabulary:

refine-	очищать
Smoke-	коптить
Norseman-	скандинав
Brisling-	шпрот, брислинг
Beach seine-	береговая рыболовная сеть
Fiord-	фиорд
To perfect-	усовершенствовать
Cross-	поперечное положение
Is subjected-	подчинено
Stringent-	строгий
Directorate of Fishery-	правление рыбного промысла

**2. Match the English words and phrases from the first column with their Russian equivalents in the second column:**

smoky-savory flavor	изобилловать минералами
to set the fishing season	прочность, крепость, плотность
catch	туго стянутый сетью

purging	данные маркировки, информация на этикетке
indigested food	выдавать патент, лицензию
throning	упаковщик
teem with minerals	непереваренная пища
soundness	со вкусом копчености
tightly netted	установить рыболовный сезон
labeling data	улов
packer	хранение под гнетом
grant license	очищение

## **Sardines of Norway**

The term “sardine” refers to various small saltwater food fish found in oceans all over the world, prized for their rich flesh and soft bones. Commonly it is the canned product refined in a special way that is called “sardines.”

The sardine canned in Norway is refined in a unique way, unlike any other. Before canning, it is carefully smoked over slow-burning oak fires, a preserving process used by Norsemen for centuries before canning methods were perfected by Stavanger Fabric in 1879. Only the Norwegian sardine has this delicious smoky-savory flavor which makes it a prized delicacy the world over.

### **Norway Sardine Varieties**

The sardine caught and canned in Norway is of two varieties: the brisling, sometimes called the sprat (*Clupea sprattus*) and the sild (*Clupea harengus*). These two distinct species are caught within the fiords or off the coast, where the sparkling, clear sea waters are teeming with minerals, washed down by rushing mounting streams.

The Norwegian brisling is a very tender-fleshed fish, juicy and plump. When canned, it ranges in size from 3 to 5 in. long, and is usually packed in pure virgin olive oil. The Norwegian sild is firm in flesh and texture, and when canned, ranges from 4 to 6 in. long. It is usually packed in light natural oil from the fish itself. Some are packed in tomato sauce and mustard sauce.

The most common size can packed is the ¼ dingley can, net weight 3 ½- 3 ¾ oz, with the sardines packed in 2 layers, one layer, and crosspacked. The 2-layer tin contains 14-26 sardines; the one layer, 6-12 sardines; the crosspacked, 30-38 sardines; and the mustard sauce, 6-12 sardines.

## **Fishing and Canning Regulated by Law**

Every aspect of the Norwegian sardine processing is subjected to stringent industry and government regulations. The Norwegian Directorate of Fisheries sets the fishing season and checks the soundness, size, and fat content of each sardine catch. In addition, a Norwegian law insists that sardines must be kept alive, tightly netted, in the water, for at least three days before they are taken to the cannery. This is called “thronging” and permits the purging of any undigested food before canning.

A special Norwegian control board supervises the canning of sardines. The Norwegian Quality Control Institute, set up in 1953 to maintain the high quality of the world-famous smoked Norwegian sardines, checks every step of the canning process, from the amount of salt to the label. The Institute’s headquarters and laboratory are located in Norway’s sardine center, Stavanger, and its inspectors oversee the canning process, even to the purity of oils and sauces and labeling data. The Institute also approves the purity of the final product and grants export licenses.

Each can of sardines from Norway is required by Norwegian law to be labeled with a thorough description of contents, kind of oil, weight, packer, and country of origin

### **3. Translate the following sentences into Russian paying attention to the peculiarities of nouns chains translation.**

1) There has been much improvement in quality of landed salmon as a result of the application of the refrigerated sea water procedure.

2) Refrigerated sea water transportation of salmon has enabled processors to divert more fish to outlets such as the fresh fish market.

3) Frozen salmon steaks or fillets should not be stored.

### **4. Translate the following nouns chains into Russian.**

fish plant

color sorting

vacuum closing machine

host product

### **5. Find out grammar forms:**

are fished

depends  
were planted  
have been exposed  
was  
planted fish

**6. Give three forms of the following verbs:**

found	called	kept
has	is	approve
makes	packed	taken
caught	sets	

**7. In the text find the sentences where Passive Voice is used and translate them into Russian.**

**8. Translate the sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

- 1) There has been much improvement in quality of landed salmon.
- 2) Where salmon were at one time unloaded by forking (pughing) or perhaps by brailing there is an increasing tendency to use sophisticated mechanical unloaders which convey the fish from vessel to fish plant.
- 3) Troll- caught salmon are almost invariably eviscerated and iced.
- 4) Since the early days, the process has been simplified by the introduction of a number of machines.
- 5) The iron chink rapidly removes heads, tails, fins and viscera.

**9. Put different questions to the following sentence:**

Pacific salmon spend their adult lives at sea and migrate to fresh water streams, there to spawn and die.

**10. Find the sentence with the infinitive construction Complex Subject in the text and translate it into Russian.**

# Unit XIV

## Sardines of Norway

### 1. Vocabulary:

purse-	мотня (в неводе)
seine-	ловить рыбу неводом
shoal=school-	косяк
packing-	консервирование
churn-	крутить, пенить воду
drag-	брედень, невод, мережа
encircle-	окружать, охватывать, опоясывать
bay-	бухта, залив
throng-	заполнять под гнетом
tub-	кадка, бочонок
brine-	соляной раствор
suspended-	подвешенный
belt-	лента конвейера
incidentally-	побочно
tinplate-	белая жечь
approve-	одобрять, санкционировать, утверждать
approved-	испытанный, проверенный, апробированный
finish-	покрытие
steamer-	пароварка

### 2. Match words and phrases from the first column with their equivalents in the second one.

allow to age	продевать через медное кольцо
large-scale	свинцовое грузило
packing plant	наполненные воздухом стеклянные шары
to net from boats	пробковый поплавок
churn and splash through	крупномасштабный
the upper waters	
to locate the shoal (school)	консервный завод
cork float	определить местонахождение косяка
air-filled glass balls	ловить сетью из лодки
lead sinker	пениться и бурлить в верхних слоях вод
pull through brass ring	отбуксировать на мелководье
to tow to shallow waters	колотый лед

cracked ice	герметически закупоривать (запечатывать)
grade to size	настаиваться
to seal hermetically	заполненная консервная банка
a finished pack	сортировать по размеру
take to	помещать в

## **Catching the Norway Sardine**

The large-scale sardine fishing is done off the west coast of Norway and in the excellent fishing harbors of the fjords, which offer a natural protection for fishing boats and packing plants.

The sardine fishing season in Norway may vary slightly year to year but it is best in the summer months from May to October when waters are smooth and feeding is best. The packing season is year round, made possible by freezing the raw product.

Sardines are netted from boats when the little rise to feed on plankton. Called the “silver harvest” from their churning and splashing through the upper open waters, sardines are often sighted by the presence of gulls and other seabirds. In Norway, fishermen use the traditional drag line plus new methods of echo sounds to locate the shoal (school) which is then encircled by purse-seines.

The purse-seines used are generally 360 ft deep and 900-1200 ft long, and are made to stand vertically in the water by means of cork floats or air-filled glass or plastic balls at the upper edge and by lead sinkers at the bottom. A rope pulled through brass rings at the bottom forms a pocket or purse, which traps the fish. After thronging, sardines are put into open wooden or plastic tubs, covered with cracked ice, and rushed to packing plants which are near at hand along the coast.

### **Sardine Canning**

The expression in Norway is: “Caught and canned in a day.” Inside the canning factory, machines quickly and efficiently handle everything except the hand packing. First, sardines are given a brine bath to take off their scales; this makes them more receptive to the smoking. Then they are graded to size automatically and moved along conveyor belts to a machine which threads them through the head onto thin steel rods. Suspended thus individually, they are conveyed into ovens and lightly smoked for 1 hour over slowly-burning selected oak wood. After smoking, mechanized knives cut off the heads.

Along conveyor belts, trained packers carefully hand-layer the



smoked fish into cans and inspectors check for uniform filling. Cans, incidentally, must be approved quality tinplate or aluminum, internally lacquered with approved finish.

Pure oil (either olive oil or natural sardine oil) or a sauce (tomato or mustard) is added automatically by machine. Then the lids are put on and the can is sealed hermetically, washed and placed in a steamer to cook and to thoroughly sterilize contents. Minimum sterilization time depends upon tin size; for standard tins, 112 C for 1 hour. The finished pack is taken to a storage room where it is allowed to age, like good wine. A can of Norwegian sardines, according to its packers, will last indefinitely.

**3. Translate the sentences into Russian paying attention to the translation of nouns chains:**

1) The term “sardine” refers to various small saltwater food fish found in oceans all over the world.

2) The Norway sardine is usually packed in pure virgin olive oil, in tomato sauce and mustard sauce.

3) Every aspect of the Norway sardine processing is subjected to stringent industry and government regulations.

4) The Norwegian Directorate of Fisheries sets the fishing season and checks?

**4 Translate the nouns chains:**

preserving process

2-layer tin

mountain streams

canning methods

Quality Control Institute

sea waters

**5 Find out grammar forms:**

may vary

the old-fashioned methods

has come

will last

are still using

are called

must be approved

slowly-burning selected oak

wood

**6 In the text find the sentences where Passive Voice is used and translate them into Russian.**

**7 Find 15 irregular verbs in the text and write down their 3 forms.**

**8. Translate the sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

1) Without the efforts of some organizations salmon stocks have

been decimated long ago.

2) Before canning, a salmon is carefully smoked over slow-burning oak fires, a preserving process used by Norsemen for centuries before canning methods were perfected by Stavanger in 1879.

3) Only the Norwegian sardine has this delicious smoky-savory flavor which makes it a prized delicacy the world over.

4) Attempts to identify the substance that exerts the attractant effect have met with only limited success.

5) These two distinct species are caught within the fjords or off the coast, where the sparkling, clear sea waters are teeming with minerals.

### **9. Find out the functions of the participles:**

1) The visceral cavities and surrounding tissues were attacked by digestive enzymes with resulting discoloration and softening.

2) It is the canned product, refined in a special way that is called “sardines”.

3) When canned, the Norwegian brisling ranges in size from 3 to 4 in. long, and is usually packed in pure olive oil.

### **10. Put questions to the every paragraph so that to express the main idea of it.**

## **Unit XV**

### **1. Vocabulary:**

defray-	оплачивать, возмещать
pack-	консервировать
ash-	зола
riboflavin-	витамин В
niacin-	ниацин, амидникотиновая кислота, витамин РР
delectable-	восхитительный
canapé-	ломтик поджаренного хлеба с икрой или другой закуской

hors-d oevre-	фр. закуска
discriminating-	разборчивый, тонкий ценитель
rarebit-	гренок с сыром
crepe-	блин
croquette-	крокеты
shirred egg-	яйцо-пашот, омлет со сливками и сухариками
scrambled eggs-	яичница, омлет
semiofficial-	полуофициальный, официозный
expenditure-	расход(ы)
quasi-	квази-, полу-
manifestation-	проявление, обнародование
brine-	соляной раствор

**2. Match the words and phrases in the first column with the words from the second one.**

beach seine	нанимать на работу
be prized for	береговая рыболовная сеть
research laboratory	упор на качество
canning industry	единственный в своём роде
one of its kind	консервная промышленность
stressing of quality	научно-исследовательская
лаборатория	
employ	цениться за...

## **Sardines of Norway. Nutritional Value.**

Sardines are one of the best and least expensive sources of protein. They are rich in vitamins A and D and also in minerals. According to the Research Laboratory of the Norwegian Canning Industry, a can of Norway sardines contains more calcium than a cup of milk. They are also an excellent source of phosphorus. Sardines have valuable amounts of magnesium, iron, copper, ash, iodine, riboflavin, and niacin.

### **Serving Suggestions**

Like caviar, the delectable smoked Norway sardine is prized for making canapés and hors-d oeuvres. Although it is very reasonable in price, this sardine delicacy is served by the most discriminating chefs and hostesses the world over. It is also used in salads and main dishes, such as rarebits, crepes, croquettes, shirred or scrambled eggs. Norway sardines, packed in handy, easy-opening cans, are also energy-boosting favorites with fishermen, campers, boaters, and hikers all over the world.

## Industry History

The Norwegian Canning Industry was founded in 1842. During the first period mainly meats, various kinds of vegetables, and fishballs were packed, but from 1878, however, beginning with the canning of sardines in olive oil, canned fish goods became more important.

The Industry works in close contact with science. The Research Laboratory of the Norwegian Canning Industry – the largest of its kind in Europe - was founded in 1931 at Stavanger to assist in the developing of new products and new machinery and to maintain control over raw materials. The Laboratory maintains chemical, bacteriological, and technical departments. It is a semiofficial body, its expenditures coming from special fees paid by the canning industry itself.

Another quasi-governmental agency aiding the industry is the Quality Control Institute, also founded at Stavanger. It maintains a strict quality control of all conserved and semiconserved fish goods, both on export goods and on commodities for the home market. No commodity may be exported without first being approved by the Control Institute.

A further manifestation of the high standards that the industry has set up for itself is a technical school which was established at Stavanger in 1952, providing a 1-2 yr course to train young men and women for responsible positions in canning. The Norwegian Canning School is the only one of its kind in the world; its costs defrayed by the factories, it represents one of the most recent advances in industrial thinking.

This stressing of quality in its production has made the savory, smoked Norway sardine a favorite the world over. Some 35,000 tons were shipped in 1970 to 60 countries, with the United States its main market. There are 65 plants in Norway and they employ 4000-5000 persons.

Norway is the fifth largest producer of fish products in the world and some 50,000 Norwegians are fishermen.

### **3. Translate the sentences into Russian paying attention to the peculiarities of nouns chains translation. Underline the nouns chains.**

1) The sardine fishing season in Norway may vary slightly year to year but it is best in the summer months.

2) Practically all brisling fishing is carried on today by purse-seine fishing vessels.

3) The purse-seines are made to stand vertically in the water by means of cork floats or air-filled glass or plastic balls at the upper edge and

by lead sinkers at the bottom.

4) Sardines are given a brine bath to take off their scales and then are moved along conveyor belts to a machine which threads them through the head onto thin steel rods.

#### **4. Determine grammar functions:**

was founded	easy-opening can
canned fish goods	more important
beginning with the canning of sardines	has made
it costs	

**5. In the text find the sentences where Passive Voice is used and translate them into Russian.**

**6. Translate the sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

1) Sardines are graded to size automatically and moved along conveyor belts to a machine which threads them through the head onto thin steel rods.

2) A can of Norwegian sardines, according to its packers, will last indefinitely.

3) The bottom fish industry for cod, haddock, and ocean perch has drastically declined; much of the raw material of this type used today primarily for fish stick production is being imported.

4) Nearly 60% of the fish consumed in this country in 1969 was imported.

5) The lids are put on and the can is sealed hermetically, washed and placed in a steamer to cook and to thoroughly sterilize contents.

#### **7. Determine the functions of the participles:**

1) Before canning, the sardine is carefully smoked over slower-burning oak fires, a preserving process used by Norsemen.

2) Attempts to identify the substance have met with only limited success.

3) Norwegian fishermen are still using the old-fashioned methods by fishing from the shore with beach seines, encircling a shoal which has come into a bay.

**8. Find out the grammar functions of the words ending in –ing.  
(Participle, Gerund, Noun, Adjective, part of the predicate).**

1) The sparkling, clear sea waters are teeming with minerals, washed down by rushing mountain streams.

2) Practically all brisling fishing is carried on today by purse-seine fishing vessels.

3) The migration of salmon is fascinating and largely unsolved problem, and it involves, depending on the species, newly emerged fry, 3-in. yearlings, or large 2-yr-old fish.

**9. Put the questions to the every paragraph so that to express the main idea of it.**

**10. Put different questions to the following sentence.**

During the first period mainly meats and vegetables were packed, but from 1878 canned fish goods became more important.

## Unit XVI

### 1. Vocabulary:

scallop-	гребешок
calico-	миткаль
land-	вытащить, поймать (рыбу)
landing-	улов
shuck-	извлекать из раковин
susceptible-	восприимчивый, чувствительный
fluctuation-	колебание, неустойчивость
abundance-	изобилие
stock-	рыбность
pressure-	затруднительные обстоятельства, трудное положение
toll-	дань
snail-	улитка
cod-	треска
predation-	хищничество
subject to-	подверженный (чему-л.), склонный (к чему-л.)
eel-	угорь

tow-	буксировать, тянуть на буксире
dredge-	ловить устриц сетью, сеть для ловли устриц
tumbler-	реверсивный механизм
gear-	снасти, орудия лова
trawl-	трал, донный невод
tidal-	связанный с приливом и отливом
shallow-	мелководье
dip-net-	ручной сачок
rake-	грабли, гребок
larval-	личинка

**2. Match the English words and phrases in the first column with their Russian equivalents from the second one.**

are of particular interest to...	устричное судно
fishing fleet	естественная среда обитания
mariculture	неблагоприятное изменение
aboard the vessel	обитатель морских глубин
fishery	представляют особый интерес

для...

quasi-governmental	разработка морских глубин
as well as	полу-правительственный
to be subject to predation	личиночная стадия
automated shucking methods	реверсивное устричное судно
susceptible to pollution	являться объектом нападения для хищников
larval stage	скорее всего, вероятнее всего
sponge	массовая смертность
starfish	рыболовная флотилия
bottom dweller	губка (зоол.)
by far	рыболовство, рыбный промысел
mass mortality	на борту судна
most likely	чувствительный к загрязнению окружающей среды
adverse change	безусловно
dredger	морская звезда
Natural habitat	методы автоматического извлечения моллюсков из раковин
Eel-grass	а также
Tumbler dredge	зоостера, морская трава

## Scallops

There are at least a dozen species of scallops of commercial importance in world trade. Of these, three are of particular interest to the U.S. fisherman- the sea scallop, calico scallop, and bay scallop.

The sea scallop is by far the most important of these species, but landings by the U.S. fishing fleet have been decreasing greatly over the past years. In 1970, only 7.4 million pounds of meats were landed, less than  $\frac{1}{2}$  the 1964-1968 average of 15.4 million pounds. Demand is, however, so great that although landings decreased by 2.3 million pounds in 1970 as compared with 1969, the value to the fisherman decreased only 0.5 million pounds from the 9.8 million pounds earned in 1969.

It is possible that with the recent development of automated shucking methods adapted to use aboard the vessels, the calico and, to some extent, the bay scallop will increase in importance. The bay scallop fishery, however, is particularly susceptible to pollution problems and, despite intensive management efforts, may have to depend on new developments in mariculture as well as automated shucking processes to achieve a position of major importance in the scallop industry.

Although its range extends from the Gulf of St. Lawrence to Cape Hatteras, Georges Bank is the most important fishing ground for sea scallops. Second in importance to Georges Bank is the area off the Virginia Capes which supplied a large part of the landings during the mid-1960s.

Fluctuations in abundance of sea scallop stocks appear to result mainly from fishing pressures. In the larval stages, plankton eaters will take their toll; and after the scallops become bottom dwellers, sponges, snails, starfishes, and bottom feeders such as cod will weaken or consume the young scallops. There does not appear to be any particular organism causing losses from disease. Where mass mortalities do occur, they most likely are caused by an adverse change in the environment, particularly with an increase in water temperature since scallops are very intolerant of temperatures above 20 C.

The calico and bay scallops appear to be subject to predation similar to the sea scallop; but in addition, as noted above, the bay scallop is subject to pollution problems and possibly even more devastating is destruction of its natural habitat by eel grass disease.



## Harvesting

Sea scallops are caught by vessels up to 100-ft long towing 2 dredges simultaneously- 1 from each side of the vessel. For calico scallops, tumbler dredges (which will fish either side up) have been the gear of choice; but, recently, scallop trawls capable of producing 60 bu per 5-min tow have become increasingly popular for use on hard, sandy bottoms where they will often outfish the dredges by as much as 6 to 1. Bay scallops may be caught with dredges similar to those used with the other species; or in the shallow tidal flats they may be taken with dip nets, rakes, or even picked by hand.

### 3. Translate the following sentences paying attention to the peculiarities of nouns chains translation.

1) According to the Research Laboratory of the Norwegian Canning Industry, a can of Norway sardines contains more calcium than a cup of milk.

2) From 1878, beginning with the canning of sardines in olive oil, canned fish food became more important.

3) The Quality Control Institute maintains a strict quality control of all conserved fish goods, both on export goods and on commodities for the home market.

4) This technical school provides a 2-year course to train young men and women for responsible positions in canning.

### 4. Determine grammar forms:

the most important

have been decreasing

may have to depend

will increase

were landed

appear to result

are caught

have become

may be taken

have been developed

must be disposed

### 5. Look through the text, find sentences containing Passive Voice and translate them into Russian.

### 6. Translate the sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.

1) The Norwegian Canning Industry was founded in 1842.

2) This stressing of quality in its production has made the savory, smoked Norway sardine a favorite the world over.

3) Sardines are netted from boats when the little fish rise to feed on

plankton.

4) A rope pulled through brass rings at the bottom forms a pocket, which traps the fish.

5) Some of the Norwegian fishermen are still using the old fashioned methods by fishing from the shore with beach seines, encircling a shoal which has come into a bay.

**6 Find 3 sentences with the infinitive construction Complex Subject in the text and translate them into Russian.**

**7 Determine the functions of the participles:**

1) Another quasi-governmental agency aiding the industry is the Quality Control Institute, also founded at Stavanger.

2) A further manifestation of the high standards that the canning industry has set up for itself is a technical school which was established at Stavanger in 1952, providing a 1-2 yr course to train young men and women for responsible positions in canning.

**8 Put questions to the every paragraph so that to express the main idea of it.**

**9 Put different questions to the following sentence:**

The technical school was established at Stavanger in 1952 and it provided a 1-2 yr course to train young men and women for responsible positions in canning

## Unit XVII

### 1. Vocabulary:

trash-	мусор
tow-	буксируемое судно
toulder-	крупный кусок
shovel-	швырять
dispose of-	удалять, убирать
muslin-	муслиновый, кисейный,
MITKALEVYI	
exceed-	превышать, превосходить
hold-	хранилище, вмещать
shuck-	извлекать из раковин, очищать
shock-	удар

barrel-	бочка
dump-	выгружать, вываливать
brine-	рассол, соляной раствор
waxed-	вощёный
pouch-	мешок, сумка
blast-	поток, струя воздуха
nitrogen-	азот
refrigerant-	охладитель, хладагент
batter-	бездрожжевое жидкое тесто
breading-	панировка, обваливание в сухарях
landing-	улов
rate-	способ; скорость, темп
conclusively-	окончательно, решительно,
убедительно	
prior to-	до, перед, раньше, прежде
lb = pound-	фунт
1bu= 35.2 litres	1 бушель=35.2 литра
1 gal( gallon)=3.785 litres	
hr = hour	
in. =inch-	дюйм

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

undersized	морозильная камера с жидким азотом
shovel overboard	извлекать из раковины вручную
adductor muscle	скорость охлаждения
carefully ice	формировать брикеты из замороженного мяса на берегу
to shuck by hand	ограниченное количество испытаний
to install aboard	недостаточно большого размера
liquid-nitrogen freezer	устанавливать на борту
6-hr soak	выбрасывать за борт
cooling rate	приводящая мышца
automated shucking equipment	6-часовое вымачивание
limited tests	тщательно охлаждать,
замораживать	
plate frozen ashore	оборудование, осуществляющее автоматическое извлечение моллюсков из раковин

# Scallops

## Processing at Sea

Sea scallops. –Considerable trash ranging from undersized scallops and unmarketable species of fish to large boulders are picked up in each tow of the dredge and must be disposed of-scallops measuring 3 in. and over in shell height are saved, and the trash is shoveled overboard.

A special knife is used to separate the shells and cut the adductor muscle (which is the only part saved by U.S. fishermen) free from the shell. In Europe, the gonads are also saved and are highly esteemed as a delicacy exceeding that of the adductor muscle itself.

The meats are then washed and put in muslin bags which hold about 35 lb. The filled bags are carefully iced in the hold to keep the scallops from spoiling.

Calico and Bay Scallops. – The small size of these scallops makes it impossible economically to shuck them by hand aboard the vessel.

However, machines based on the “shock-heat-shock” method have been developed and installed aboard some of the larger vessels. After shucking, the meats are washed in sea water, packed in plastic tubs holding about 10 lb, then iced down in the vessel’s hold.

## Processing Ashore

Sea scallops. – As the catch is unloaded, the meats may be processed immediately, or sometimes the bags of meat are packed with ice in boxes or barrels and held overnight, or occasionally longer before processing.

At the processing line, the meats are dumped into a washing tank containing a 6’-8’ salometer brine (about 1.5-2.0 salt by weight) and given a brief rinse. The meats are then conveyed to the packing table. Large meats are cut into “bite-size” pieces before packing into waxed cartons or plastic pouches. Quick freezing the meats individually in air-blast, liquid nitrogen, liquid carbon dioxide, or liquid refrigerant (Freon 12) before packing is also practiced; and very often, the meats will be coated with batter and breading, deep-fat fried, then frozen and packaged.

Calico and Bay Scallops. – As the shell stock is unloaded, it is packed into boxes or baskets and held overnight. Much of the shucking is

still done by hand at a rate of 1 gal (lbs) of meats per hour. As it takes about 1.75 bu to produce 1 gal of meats and as average daily landings are about 500 bu per vessel, then during an 8-hr day, each shucker will process 14 bu of shell stock, and 35-40 shuckers will be required per vessel! It is obvious that before these resources can be fully and economically utilized, automated shucking processes must be adopted; and for maximum quality, the equipment should be installed on the vessel as described by Cummins (1970). In any case, the shucked meats are washed and frozen, very often individually in liquid-nitrogen freezers, then packed in 5-lb plastic bags.

## **Quality Considerations**

Freezing Scallops Aboard the Vessel. – Only limited tests have been conducted on freezing scallop meats aboard the vessel, but the results show that even slowly frozen sea scallop meats (approximately 24 hr. to reach -15 C) are superior in quality to scallop meats held 48 hr. in ice then plate frozen ashore.

The scallop industry is one of considerable value to the economy of the U.S. fishing industry; and with further development of automated shucking equipment, rapid chilling and freezing aboard the vessel, and better quality control in general, it should to increase in importance.

### **3. Translate the following sentences into Russian paying attention to the peculiarities of nouns chains translation.**

1) The bay scallop fishery is particularly susceptible to pollution problems and, despite intensive management efforts, depends on automated shucking processes to achieve a position of major importance in the scallop industry.

2) Georges Bank is the most important fishing ground for sea scallops.

3) Fluctuations in abundance of sea scallop stocks results mainly from fishing pressures.

4) In the larval stages, plankton eaters will take their toll; and after the scallops become bottom dwellers, bottom feeders such as cod will consume the young scallops.

5) Mass mortalities are caused by an increase in water temperature.

6) The most devastating problem of the bay scallops is destruction of its natural habitat by eel grass disease.

#### **4. Determine Grammar forms:**

the most important	must be disposed
have been installed	may have to depend
will increase	were landed
have become	after shucking
waxed cartons	will be coated
shucked meat	are frozen

#### **5. Look through the text, find sentences containing Passive Voice and translate them into Russian.**

#### **6. Translate the following sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

1) The sea scallop is the most important of a dozen species of scallops, but landings by the U.S. fishing fleet have been decreasing greatly over the past years.

2) In 1970 only 7.4 million pounds of meats were landed.

3) Where mass mortalities do occur, they most likely are caused by an adverse change in the environment.

4) Demand is so great that although landings decreased by 2.3 million pounds in 1970 as compared with 1969, the value to the fishermen decreased only 0.5 million pounds from the 9.8 million pounds earned in 1969.

5) It is possible that with the recent development of automated shucking methods the sea scallop will increase in importance.

#### **7. Look through 2 texts Scallops (unit 7 and 8) and copy out the sentences containing Modal Verbs (10). Translate them and determine Tense and Voice of Modals.**

#### **8. Find out the functions of the participles:**

1) These 2 distinct species are caught within the fjords or off the coast, where the sparkling, clear sea waters are teeming with minerals, washed down by rushing mountain stream.

2) The term “sardine” refers to various small saltwater fish found in oceans all over the world, prized for their rich flesh and soft bones.

3) During the first period mainly meats and vegetables were packed, but from 1878, beginning with the canning of sardines in olive oil, canned fish goods became more important.

**9. Determine the functions of the infinitive:**

1) Pacific salmon migrate to fresh waters to spawn and die.

2) Each can of sardines from Norway is required by Norwegian Law to be labeled with a thorough description of contents.

3) The sea scallop fishery depends on new developments in mariculture to achieve a position of major importance in the scallop industry.

4) With the recent development of automated shucking methods adapted to use aboard the vessels, the sea scallop will increase in importance.

**10. Put questions to the every paragraph of the text so that to express the main idea of it.**

## Unit XVIII

### Shellfish

#### 1. Vocabulary:

by far-	намного, гораздо, значительно,
безусловно	
finfish-	1) кит-полосатик
	2) финвал = fin-back
crustacean-	ракообразное
jointed appendage-	сочленённый придаток
clam-	съедобный морской моллюск
mussel-	1) двустворчатая ракушка, двустворчатый моллюск 2) мидия
crayfish= crawfish-	рак амер. разг.
gill-	жабры
locomotion-	передвижение, путешествие
notably-	особенно

farm-	присматривать (за детьми), воспитывать
range from-	колебаться в определённых пределах
boulder-	крупный кусок
tower of the dredge-	устричное судно
considerable-	множество, значительное количество
bond-	соединение
carbohydrate-	углевод
maritimes-	побережье

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

hinged shell	копчение
species names	обезвоживание,
дегидратация	
nutritive value	в основном, по большей
части	
members of the mollusk class	в замороженном виде
the coast of the pacific northwest	створчатая раковина
for the most part	йод
maritime	преобладающий вид
the dominant species	представители класса
МОЛЛЮСКОВ	
dehydration	прибрежный район
iodine	названия видов
smoking	питательная ценность
in the frozen form	северо-западное побережье
Тихого	

океана

## Shellfish

Since shellfish are discussed in detail under their species names, they will be described here in terms of their classification, areas where grown or caught, types of processing, and nutritive values. Shellfish are found along seacoasts, in bays, and in lakes and rivers. By far the greatest volume of shellfish comes from saltwater sources.

Shellfish, as the name indicates, are distinguished from finfish by their shells. There are two major classes: mollusks, with hinged shells, and crustaceans with segmented shells and jointed appendages. Clams, mussels, oysters and scallops are members of the mollusk class; crayfish, crab, lobster, and shrimp are the chief species of the crustacean group. The



crustaceans are higher up on the evolutionary ladder than the mollusks since they have gills, sensory organs, and a means of locomotion.

Oysters are grown, farmed one might say, on the east coast of the United States, the Gulf of Mexico, and off the Louisiana coast. A difference species of oyster, the Japanese oyster, is grown on the Pacific coast. Clams are widely distributed but the chief areas are the coasts of New England, the Middle Atlantic and the Pacific Northwest. Scallops are almost exclusively taken along the coasts of New England, New York, and New Jersey. Mussels are found along the Atlantic coast, principally in rocky areas.

Members of the crustacean classification are found on both coasts, the one exception being lobster which is trapped for the most part on the New England cast and the maritimes. Crabs are taken along the coast of New England, the mid-Atlantic coastal waters, Louisiana, and the Pacific Coast states. The blue crab is the dominant species on the Atlantic side of the United States. Shrimps are caught on both coasts but the principal source is the Gulf of Mexico.

Although shellfish are preserved by canning (lobsters, crab, shrimp, oysters, and mussels, for the most part) and by dehydration (notably shrimp) and by smoking (oysters), they are more usually bought fresh or in the frozen form. Large quantities of shellfish are frozen in the United States. In fact, every form of shellfish mentioned in this brief article is available in frozen form. Freezing promises to be the dominant method of preserving shellfish in the future not only in the United States but in the world at large.

Shellfish have excellent nutritional qualities. Shrimp has as high a percentage of protein per gram as beef, a low fat content and no carbohydrate. All shellfish have a relatively high mineral content, including iodine, one of the essential minerals.

### **3. Translate the following sentences into Russian paying attention to the translating chains of nouns:**

1) In the sea scallop fishery, the washing process may range from a brief rinse to a 6-hr soak in sea water.

2) The scallop industry is one of considerable value to the economy of the U.S. fishing industry; and with further development of automated shucking equipment and better quality control in general, it should continue to increase in importance.

### **4. Translate the chains of nouns:**

shell height  
muslin bag  
sea water  
“bite-size” pieces  
sea scallop meats

adductor muscle  
“shock-heat-shock” method  
deep-fat fried meat  
bacteria growth

**5. Form compound nouns matching words in the first column with the words from the second one. Find these compound nouns in the text.**

shell  
sea  
salt  
fin  
cray  
north  
carbo

west  
hydrate  
fish  
water  
coast

**6. Determine grammar forms:**

are discussed  
types of processing  
might say  
in frozen form

will be described  
higher than  
the greatest

**7. Look through the text and find sentences containing Passive Voice and translate them into Russian.**

**8. Translate the following sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

1) Machines based on the “shock-heat-shock” method have been developed and installed aboard some of the larger vessels.

2) As it takes about 1.75 bu to produce 1 gal. of meats and as average daily landings are about 500 bu per vessel, then during an 8-hr day, each shucker will process 14 bu of shell stock, and 35-40 shuckers will be required per vessel.

3) During the first period mainly meats and vegetables were packed but from 1878, canned fish goods became more important.

4) The results show conclusively that rapid cooling of scallop meats prior to bagging and icing yields a product of significantly higher quality.

5) As the catch is unloaded, meats are packed with ice in boxes and held overnight.

**9. Give 3 forms of the following verbs:**

	pick	keep	begun
cool		continue	grow
are		spoil	given
cut		base	freeze
show		expect	limit
hold		been	burn
put		pay	done
makes		found	has

**10. Find out the functions of the participles in the following sentences:**

1) Considerable trash ranging from undersized scallops and unmarketable species of fish to large boulders are picked up in each tow of the dredge

2) and must be disposed of – scallops measuring 3 ¼ in. and over in shell height are saved, and the trash is shoveled overboard.

3) Suspended thus individually, they are conveyed into ovens and lightly smoked for 1 hr. over slowly-burning selected oak wood.

4) In fish oils considerable fatty acids with 5 and 6 double bonds are present, making them highly susceptible to oxidation.

**11. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**12. Find out the function of the infinitive:**

1) In order to maintain salmon stocks active research has been conducted for many decades.

2) There doesn't appear to be any particular organism causing losses from disease.

3) The small size of these scallops makes it impossible economically to shuck them by hand aboard the vessel.

## Unit XIX

### Shrimp

**1. Vocabulary:**

confine-  
subsequent-  
результатом, вытекающий

ограничивать  
1) последующий 2) являющийся

trawl-	трал, донный невод
tow-	буксироваться, идти на буксире
dump-	вываливать, выгружать
otter trawl-	оттертрал
headrope-	шкаторина
haul in-	втягивать, выбирать
debris-	мусор
hereafter-	в будущем, в дальнейшем
autolitic-	автолитический (растворяющийся)
carbohydrate-	углевод
ambient-	охватывающий(ся) со всех сторон
genera= genus-	род, сорт, вид
predominance-	превосходство
thereby-	таким образом
rsw= refrigerated sea water	
shift-	перемещение, перемещаться
likelihood-	вероятность
sodium-	натрий
mesh bag-	сеть-мешок
glaze-	покрывать льдом
incompatible	несовместимый, несочетающийся
means-	средство, способ
dump-	выгружать, вываливать
brine-	рассол

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

the harvesting of shrimp	в основном, по большей части
the ocean floor	ночной лов
night fishing	достаточное количество льда
long before	в соотношении
contribute to the degradation process	утечка хладагента
for the most part	бушующее море
dehead	вылов креветок
sufficient ice	решающее время
critical time	дно океана
ambient temperature	в качестве эксперимента
natural environment	задолго до того, как
thoroughness of washing	в ряде случаев
efficiency of icing	способствовать процессу ухудшения

качества

with the ratio	охладитель, хладагент; охлаждающая среда
it is imperative	удалять голову
in a few instances	холодильное оборудование
refrigeration equipment	охлаждающая температура
rough sea	необходимо
refrigerated sea water	тщательность мытья
capsizing the boat	эффективность замораживания (хранения во льду)
refrigerant	естественная окружающая среда
on an experimental basis	охлаждённая морская вода
refrigerant leak	опрокидывание лодки

## **Shrimp: Handling and Processing**

The harvesting of shrimp is confined almost entirely to night fishing on bottoms ranging from sandy to very muddy. The type of bottom from which shrimp are taken determines to a large degree the subsequent quality, all other factors being equal. Shrimp harvested from muddy bottoms may contain up to 30 million bacteria per gram while those from sandy bottoms contain far less.

The quality of the shrimp starts in the trawl, varying with the time in which the trawl is towed. Shrimp trawls are towed slowly along the ocean floor from 1 ½ -5 hr. depending on the concentration of shrimp. Shrimp caught early in trawling may die and start to deteriorate long before the catch is dumped on the deck. The high temperature of the Gulf of Mexico waters during the shrimping season contributes to the degradation process while shrimp are in the trawl.

Shrimp are taken for the most part in otter trawls ranging in size from 12 to 110 ft. (measured as the width along the headrope) depending on the size and power of the individual boat. Once the trawl is hauled in, the catch is dumped on deck where the shrimp are separated from the rest of the catch. In addition to shrimp, the catch may consist of crabs, fish, sponges, and a variety of sea animals, plus stones, shells, and other debris. Sorting out the shrimp may take several hours, thus adding to the time in which deterioration can take place. The shrimp are then deheaded, thoroughly washed, and placed in the hold of the vessel. Sufficient ice is mixed with the shrimp tails to maintain the quality of the catch until arrival at the dock.

The time is critical from death of the shrimp until they are placed

on ice. Immediately after death, autolytic and bacterial enzymes begin breaking down the proteins, lipids, carbohydrates, etc. It is imperative that the shrimp be thoroughly to remove as much bacteria as possible and then reduce the ambient temperature well below that of its natural environment. The bacterial flora associated with shrimp is confined mainly to the genera *Flavobacter*, *Achromobacter*, *Bacillus*, and *Micrococcus*. The predominance of each genus changes considerably during storage. For example, the first major change occurs between the 4<sup>th</sup> and 5<sup>th</sup> day of iced storage, the second change between the 10<sup>th</sup> and 11<sup>th</sup> day, the third and last major change takes place between the 12<sup>th</sup> and 15<sup>th</sup> day of storage. The maximum storage time of shrimp on ice varies up to three weeks depending on thoroughness of washing and efficiency of icing after washing. Generally, the shrimp are layered with ice, i.e., a layer of ice and a layer of shrimp with the ratio of ice to shrimp 2:1. It is essential that the hold be held at a temperature just above freezing to allow the ice to melt thereby washing away bacteria and enzymes which may accumulate on the surface of the shrimp. The holds of the boat are constructed so that the melted ice and shrimp juices can be removed during storage.

In a few instances shrimp boats are equipped with refrigerated sea water (RSW) in which the shrimp are held at 35°-40°F. There are several drawbacks to this method: (1) the boat must be equipped with refrigeration equipment; (2) the RSW shifts in the boat during rough seas increasing the likelihood of capsizing the boat; (3) the RSW must be changed frequently, probably increasing the cost over ice-held shrimp; (4) shrimp are in contact with the RSW for long periods of time thereby reducing the storage life; (5) holding in RSW tends to increase the sodium content of the shrimp; and (6) possibility of the refrigerant leak endangering the lives of the crew and contaminating the catch of the refrigerant.

A few shrimp boats have installed a sugar-brine freezing solution on an experimental basis. Washed shrimp (50 lb) are placed in a mesh bag and immersed in the solution until the shrimp are frozen. This method provides individually frozen shrimp which are then glazed and packed in cartons for subsequent storage.

### 3. Translate the chains of nouns:

species names

crustacean group

crustacean classification

saltwater sources

fat content

mineral content

#### **4. Find out grammar forms:**

have installed	is becoming
allows the shrimp to be frozen	may be sold
spoiled shrimp	the harvesting of shrimp
far less	takes place

**5. Look through the text, find sentences with Modal Verbs, translate them into Russian and determine Tense and Voice of Modals. Give equivalents of Modal Verbs.**

**6. Translate the sentences into Russian paying attention to the use of Tenses and Voices. Underline the predicates.**

1) Since shellfish are discussed in detail under their species names, they will be described in terms of their classification.

2) The conclusion has been that power dams and good stocks of salmon are incompatible.

3) Some 35000 tons of Norway sardine were shipped in 1970 to 60 countries, with the United States its main market.

4) Second in importance to Georges Bank is the area off the Virginia Capes which supplied a large part of the landings during the mid-1960's

5) Recently, scallop trawls capable of producing 60 bu per 5-min tow have become increasingly popular for use on hard, sandy bottoms where they will often outfish the dredges by as much as 6 to 1.

6) The wide range of oil content in different species of fish provides a means of supplying protein with varying calorie content.

**7. Determine the functions of participles in the following sentences:**

1) There are two major classes: mollusks, with hinged shells, and crustaceans with segmented shells and jointed appendages.

2) All shellfish have a relatively high mineral content, including iodine, one of the essential minerals.

3) At the processing plant the meats are dumped into a washing tank containing a 6°-8° brine and given a brief rinse.

**8. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

# Unit XX

## Shrimp

### 1. Vocabulary:

once-	как только, сразу же
on the spot-	тут же, сразу, немедленно
grader-	сортировальная машина
plate freezer-	обшитая металлом морозилка
hoist-	подъёмное устройство, подъёмник,
лебёдка	
deicing tank-	антиобледенитель, противообледенительное устройство
decompose-	гнить, разлагаться
size in increments-	сортироваться по величине с прибавлением
subsequently-	впоследствии; затем, потом
await-	ждать, ожидать
blast-	вдувать воздух, продувать
bread-	обваливать в сухарях, панировать
market-	продавать
precook-	заранее готовить; полуфабрикат
devein-	удалять жилы
gumbo-	суп из стручков бамии
pickled-	засоленный, замаринованный
gourmet-	гурман, гастроном
take from-	добывать(ся)
cannary-	консервный завод
grade-	сортировать
brine-	рассол
citric acid-	лимонная кислота
ammonia-	аммиак, разг. нашатырный спирт
slime-	слизь
segment-	часть, доля
enhance-	усиливать
delay-	откладывать
eventually-	в итоге; в конце концов
spot-	пятнистость
proliferate-	размножаться; расти, распространяться



predation-  
ground up-

хищничество  
складывать на землю кучей

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

inspection station  
creole

бисульфат натрия  
меланоз, избыток меланина в

ТКАНЯХ

smoked  
breeding  
blanch

бланшировать  
удаление головы  
станция экспертизы

fantail

копчёный

deheading

дезинфицирующий раствор

sodium bisulfate

креолка

dipping solution

панировать, покрывать сухарями

melanosis

регидратация (присоединение

ВОДЫ)

rehydrating

веерообразный хвост

**Shrimp: Handling and Processing (text 2)**

The installation of mechanical equipment on boats is becoming more prevalent. This equipment allows the shrimp to be frozen on the spot. This is a most ideal system and shrimp handled in this manner are always of prime quality. Graders and plate freezers are part of the system.

Once in port, iced shrimp are unloaded by a hoist and a large basket and then placed in a deicing tank. A conveyer moves the shrimp to an inspection station where inspectors further remove trash, ice, and decomposed shrimp; shrimp are then conveyed into the processing plant. Subsequently the shrimp are moved to a mechanical grader and sized in increments of 5, i.e., 21-25, 26-30, 31-35, etc., shrimp per pound. The shrimp are weighed into 5-lb cartons to be or placed in 100-lb boxes and mixed with ice to await further processing. The 5-lb cartons are frozen in a plate or blast freezer at -40°F, glazed with ice water, packed in 50-lb cartons, and stored at -10°F.

Shrimp frozen and packed at sea are unloaded at dock side and placed directly in a holding freezer.

Shrimp are processed in many ways and utilized in various products. The majority of shrimps are peeled, breaded, and frozen, or

peeled and frozen. Breaded shrimp are marketed as “frozen raw breaded” or “breaded precooked” shrimp. The peeled shrimp are sold as raw “peeled and deveined” (P&D) or “cooked peeled” shrimp. Shrimp may also be sold in the shell frozen or iced. Small peeled shrimp are utilized in specialty items such as gumbo, shrimp creole, cocktails, smoked shrimp, pickled shrimp, shrimp soups, and paste.

Shrimp are mechanically peeled for the most part although some hand peeling still exists. The manner in which shrimp are peeled is determined by the end product. For breaded shrimp, all segments of shell are removed down to, but not including, the last (or sixth) segment. The entire shrimp is then covered with breading. All shell segments and the fantail are removed from shrimp to be used in speciality items, cooked peeled, P&D, and canned shrimp. After processing, the product is again frozen or canned ready to be offered for sale.

Shrimp used for canning purposes are handled somewhat differently from those to be frozen or utilized in gourmet items. Small shrimp are taken from the inside waters at certain times of the year and brought in on small boats (25-30 ft in length). These shrimp are brought in overnight to the canneries and generally are not deheaded. Very little ice is used. The shrimp are conveyed to a mechanical peeler which removes the heads and shells leaving only the meats. The peeled shrimp are blanched in a salt solution, graded, and placed in cans. Hot brine is added, the cans are sealed and heat processed. Additives, such as citric acid or lemon juice, may be added to the cans before sealing to prevent chemical changes in the product during storage.

Spoiled shrimp are characterized by a strong ammonia odor and in advanced stages of spoilage will discolor and contain a heavy slime. Shrimp that are not handled properly will develop “black spots” on shell segments particularly in the area where the head is removed. Delayed deheading or poor icing techniques will enhance this development which will eventually spread to the meats. Sodium bisulfate is used as a dipping solution to prevent the formation of black spot. Proliferating enzymes in the head are responsible for this spoilage which is referred to as “melanosis.”

In 1961, at least one plant on the Gulf was freeze-drying shrimp. Due to difficulty in rehydrating the product the process has not been widely accepted.

Shrimp heads and waste products are ground up and dried to produce shrimp meal. This product is used in animal feeds where high

concentrations of proteins are desired.

**3. Translate the following sentences paying attention to the peculiarities of translating chains of nouns.**

- 1) Shrimp trawls are towed slowly along the ocean floor.
- 2) The high temperature of the Gulf of Mexico waters during the shrimping season contributes to the shrimp degradation process.
- 3) Shrimp boats are equipped with refrigerated sea water in which the shrimp are held at 35°-40°F.

**4. Translate the following chains of nouns:**

sea animals	shrimp tails
maximum storage time	shrimp juices
refrigeration equipment	sodium content
refrigerant leak	a sugar-brine freezing solution

**5. Find out grammar forms:**

efficiency of icing after washing	are taken
determines	
can be removed	frozen shrimp
fur-bearing animals	were covered
has caused	are making
have been shown	

**6. Translate these sentences into Russian. Determine the Tense and Voice of the predicates.**

- 1) The quality of the shrimp starts in the trawl, varying with the time in which trawl is towed.
- 2) A few shrimp boats have installed a sugar-brine freezing solution on an experimental basis.
- 3) The meats will be coated with batter and breading, deep-fat fried, then frozen and packaged.
- 4) A further manifestation of the high standards that the industry has set up for itself is a technical school which was established at Stavanger in 1952.

**7. Determine the functions of the participles in the following sentences:**

- 1) The harvesting of shrimp is confined almost entirely to night fishing on bottoms ranging from sandy to very muddy.
- 2) Shrimp harvested from muddy bottoms may contain up to 30

million bacteria.

3) Sorting out the shrimp may take several hours, thus adding to the time in which deterioration can take place.

**8. Find out the functions of the infinitives:**

1) Sufficient ice is mixed with the shrimp tails to maintain the quality of the catch until arrival at the dock.

2) The bay scallops appear to be subject to predation.

3) Modern food technology has provided means particularly with regard to temperature control, which permits fish to be held without serious microbiological spoilage.

**9. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**10. Put all possible questions to the following sentence:**

Immediately after death, autolytic and bacterial enzymes begin breaking down the proteins, lipids and carbohydrates.

## Unit XXI

### Smelt

#### 1. Vocabulary:

smelt-  
sheen-  
eulachon= candlefish

amerind-  
stream-  
spawn-  
estuary-  
previous to-  
precede-  
run-  
scatter-  
gill net-  
beach seine-  
box net-  
mesh-

корюшка  
блеск, сияние

американские индейцы  
речка, ручей  
метать икру, размножаться  
устье (реки); дельта  
прежде, до, ранее  
предшествовать  
косяк (рыбы); прилив  
отдельный, разбросанный  
жаберная сеть  
береговая рыболовная сеть  
устричная сеть  
нити (сети); отверстие, ячейка

(сети)

attain-	достигать
immature-	незрелый
grade-	группа; класс, сорт; сортировать
grading-	классификация
extra-	высший сорт
use-	расходовать
headrope-	шкаторина
fluctuation-	колебание
pressures-	трудности
on the spot-	сразу же
hoist-	подъёмник, лебёдка
deicing tank-	противообледенительное
устройство	
landed value-	стоимость, цена улова
spawning-	нерест, икрометание
tributary-	приток (реки)
dip net-	ручной сачок
apparently-	явно, очевидно, несомненно
trawl fishery-	ловля рыбы неводом

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

a lean fish	основные (главные) рыбные места
the spawning run	небольшой улов
major fishery	первый сорт
main fishery	приморская область, прибрежный

район

small catch	нежирная рыба
mesh size	период размножения
maritime province	основной рыбный промысел
number one	размер ячейки (отверстия) сети
spawning migration	рыночный спрос
market demand	миграция в период нереста

## Smelt

The smelt is a small and slender fish with a silvery sheen on its side. The flesh is delicate and very flavorful and when fresh has a

characteristic cucumber smell. The smelt is abundant in the northern sections of both coasts of North America, in the Great Lakes, and in the northern waters of Europe and Asia. The American smelt ranges from Labrador to New Jersey on the Atlantic coast, and throughout the Great Lakes. The eulachon or candlefish ranges from Oregon to Alaska on the Pacific coast. The American smelt is a lean fish with a fat content no greater than 5% (whole fish). The eulachon of the Pacific coast is a fat fish with a fat content of about 10%; in fact, it is so fat that Amerinds used to dry it in the sun and use it as a candle. That is why it is also called the candlefish.

## **Commercial Fisheries**

The marine species migrates to streams for spawning, and the commercial fishery is based on that migration. On the Atlantic coast, the migration takes place in the fall when smelt invade bays and estuaries previous to the spawning run the following spring. The fishery lasts from late fall to late winter. On the Pacific coast, the fishery precedes the spring run. In the Great Lakes, the fishery is also connected with the spring run, except in Lake Erie where the fishery lasts all year round in addition to a major fishery at spawning time and in Lake Michigan where a winter fishery under the ice is the major fishery.

The East Coast Fishery.- Scattered operation take place all along the coast, but the main fishery is in the Gulf of St. Lawrence on the New Brunswick coast. Small catches are made by means of gill nets and beach seines in early fall; major catches are made in late fall and throughout the winter by means of box nets and bag nets set under the ice in streams and bays. The mesh size is usually 1 1/8 in.

Smelts on the east coast attain sexual maturity at the end of their second year of life; the immature fish (male and female) make up about 65% of the catch; mature fish to the age of 3 yr make up another 30% of the catch; fish of 4-5 yr make up only 5%. The market recognizes 4 grades: shorter than 4 in., classified as small; fish up to 5 1/2 in., called mediums; fish up to 7 in., called number ones; and larger fish rated as extras.

After grading, fish graded as extras are made up 58% of age 3 and 35% of age 4 fish; those graded as "number ones" are made up 59% of age 2 and 40% of age 3 fish.

The annual catch in the Maritime provinces used to average 7 million pounds with a landed value of about £800,000. Recent competition

from the Great Lakes caused it to decrease to about 3 million pounds a year with a value of £300,000.

## **The West Coast Fishery**

This fishery is based on the spawning migration in the winter months, and mainly in the Columbia River and its tributaries. In the Columbia River the catch is by means of gill nets, in the tributaries by means of dip nets. The fishery is exclusively for human consumption and varies between 1 million and 2 million pounds a year. Apparently, the catch is limited by market demand. Recent reports indicate that a trawl fishery for eulachon in the Columbia River is possible and could lead to improved quality.

### **3. Translate the chains of nouns:**

inspection station	salt solution	shrimp heads
shrimp soup	lemon juice	waste products
hand peeling	ammonia odor	shrimp meal
end product	icing techniques	animal feed
shell segments	sodium bisulfite	

### **4. Determine grammar forms:**

Has	no greater than
Migrates	is connected
after grading	warm-blooded animals
has not found	canned fish
was imported	became

### **5. Translate the following sentences into Russian and determine the Tense and Voice of the predicates.**

1) The installation of mechanical freezing equipment on boats is becoming more prevalent.

2) Shrimp are mechanically peeled for the most part although some hand peeling still exists.

3) Spoiled shrimp are characterized by a strong ammonia odor and in advanced stages of spoilage will discolor and contain a heavy slime.

4) In 1961, at least one plant on the Gulf was freeze-drying shrimp.

5) Due to difficulty in rehydrating the product the process has not been widely accepted.

### **5. Find out the functions of the Participles in the following**

**sentences:**

1) This is a most ideal system and shrimp handled in this manner are always of prime quality.

2) For breaded shrimp, all segments of shell are removed down to, but not including, the last (or sixth) segment.

3) Norway sardines, packed in handy, easy-opening cans, are also energy-boosting favorites with fishermen, campers, boaters, and hikers all over the world.

4) Shrimp are taken for the most part in otter trawls ranging in size from 12 to 110 ft (measured as the width along the headrope) depending on the size and power of the boat.

**6. Determine the functions of infinitives in the following sentences. Find infinitive constructions Complex Object and Complex Subject.**

1) The shrimp are weighed into 5-lb cartons to be frozen or placed in 100-lb boxes and mixed with ice to await further processing.

2) Fluctuations in abundance of sea scallop stocks appear to result mainly from fishing pressures.

3) Freezing promises to be the dominant method of preserving shellfish in the future.

4) The equipment allows the shrimp to be frozen on the spot.

5) The Norwegian Quality Control Institute was set up in 1953 to maintain the high quality of the world-famous smoked Norwegian sardines.

**7. Determine the Degree of Comparison of adjectives (Comparative and Superlative) in the following sentences:**

1) Refrigerated sea water transportation of salmon has enabled processors to divert more fish to outlets such as the fresh fish market where the financial rewards are greater.

2) Sardines are one of the best and least expensive sources of protein.

3) Shrimp harvested from sandy bottoms contain far less bacteria than those from muddy bottoms.

4) The Research Laboratory of the Norwegian Canning Industry- the largest of its kind in Europe- was founded in 1931.

5) The shrimp must be thoroughly washed to remove as much bacteria as possible.

6) This is the most ideal system.



**8. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**9. Put different questions to the following sentences:**

1) The marine species migrates to streams for spawning, and the commercial fishery is based on that migration.

2) Iced shrimp are unloaded by a hoist and a large basket and then placed in a deicing tank.

## Unit XXII

### Smelt

#### 1. Vocabulary:

planting-	внедрение, насаждение, поселение
eventually-	в итоге; в конце концов
gear-	приспособление, устройство
pound net= bottom gill net-	ставной невод, ставная сеть
congregate-	собирать(ся), сходиться
alternating-	чередующиеся, сменяющиеся
indication-	признак, симптом, знак, указание; показатель
sustain-	обеспечивать
landed value-	стоимость улова
glut-	избыток, изобилие (товаров на рынке)
adjustable-	регулируемый
batch-	группа, кучка
reject-	браковать, отбрасывать
acquire-	приобретать, достигать

totebox-	стальной поддон
hold-	хранение, хранилище
medium-	способ, средство
headrope-	шкаторина

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

year round переработки	непрерывность (целостность) процесса
alternate years формы	вытянутой, удлинённой
up to then	полиэтиленовая прокладка
echo sounding	начальная сортировка
processing continuity	круглый год
spring run	чередование
adjustable production	весенний прилив
initial sorting	к тому времени
slush ice	эхолот
elongated form	регулируемое производство
polyethylene liner	талый лёд

## **Smelt**

### **The Great Lakes Fishery**

Smelt is an introduced species in the Great Lakes; earliest plantings were in the St. Mary's River in 1905-1906 where smelt eggs from the Atlantic coast were deposited. Plantings were continued at different locations during succeeding years and apparently one of the most successful plantings was in Crystal Lake on the east shore of Lake Michigan. The smelt became established and started spreading out to different parts of Lake Michigan and eventually to the other Great Lakes. Lake Michigan and Lake Erie now have large, well-established populations of smelt that support commercial fishing operations. However, the two fisheries are entirely different in types of gear used and time of year. In Green Bay of Lake Michigan, production is by means of pound nets set under the ice during the winter months. In Lake Erie, production used to be based on the spawning run taking place mainly on the north shore of the lake in late April and early May. Pound nets were used and are

still used for that type of fishery located mainly around the Wheatley area near the western end of the lake. At other times of the year the fishery is by means of trawls in the Eastern Basin of the lake where smelt congregate and where practically year-round fishing takes place.

An unknown factor affects smelt reproduction on alternating years in Lake Erie; one year the catch consists of equal amounts of 2- and 3-yr-old fish, and the following year the catch consists of mostly 2-yr-old fish. This causes marketing problems on alternate years.

The value of the fishery increased considerably in Lake Erie with the introduction of trawling gear around 1960, causing a corresponding decrease in the value of the marine fishery on the east coast.

The annual catch appears to be stabilized at about 12 million pounds per year and indications are that the fishery could sustain a higher volume of production. Landed value on Lake Erie is approximately £500,000 per year.

## **Research**

The Canadian Federal Government carries out biological research on smelt on the east coast while the Ontario Government carries out biological research on smelt in Lake Erie. Starting in 1957, these two governments cooperated in a gear development program to improve the smelt fishery in Lake Erie. Up to then the fishery had been a seasonal operation limited to about six weeks which produced a glut on the market. Freezing part of the catch was used to spread the availability of smelt over a few more months; but the real need was for continuous production over the months to maintain processing operations and marketing at a more stable level. Echo sounding and trawling gear were used to locate smelt concentrations and to determine the type of gear which could economically be used. Trawling for smelt is now a well-established operation on Lake Erie, leading to better processing continuity, better quality, and adjustable production in response to market demands.

One of the problems of the fishery is the variation in size of fish within a catch and from year to year caused by a factor related to reproduction. Initial sorting as to size is done on board the fishing boat at the batch level; if a trawl load appears to be mainly very small fish it is immediately rejected. Sorting by means of mechanical sorters is carried out at the processing plant. Smelt acquire distorted shapes when stored in ice previous to processing, making it difficult to sort out and to process by automatic machinery. A method which prevents these problems has been

successfully tested by the Fisheries Research Board of Canada. Smelts, as soon as caught, are transferred to holdings tanks aboard the fishing vessel; the holding tanks contain slush ice, a medium that not only cools the fish rapidly but in which smelts maintain their symmetrical elongated form. Holding under similar conditions during transport and during holding before processing allow optimum processing quality and efficiency. The Division of Fish and Wildlife of Ontario developed specially designed toteboxes with removable polyethylene liners for holding smelt.

**3. Translate the chains of nouns:**

fat content	mesh size
cucumber smell	winter fishery
trawl fishery	human consumption
market demand	East Coast Fishery

**4. Determine grammar forms:**

were continued	well-established operation
succeeding years	could be used
was	processing plant
used to be based	has been tested
are used	when stored
causing a corresponding decrease	have directed
carries out	was used to
had been	the most successful

**5. Look through the text, find sentences containing Passive Voice and translate them into Russian.**

**6. Translate the sentences into Russian. Determine the Tense and the Voice of the predicates.**

1) The Research Laboratory of the Norwegian Canning Industry was founded in 1931.

2) Only limited tests have been conducted on freezing scallop meats aboard the vessel, but the results show that even slowly frozen sea scallop meats are superior in quality to scallop meats held 48 hr in ice then plate frozen ashore.

3) Delayed deheading or poor icing techniques will enhance the development of bacteria which will eventually spread to the meats.

4) The time is critical from death of the shrimp until they are placed on ice.

5) The annual catch in the Maritime provinces used to average 7 million pounds.

6) The greatest volume of shellfish comes from saltwater sources.

**7. Determine the functions of the Participles in the following sentences:**

1. The quality of the shrimp starts in the trawl, varying with the time in which trawl is towed.

2. Every form of shellfish mentioned in this article is available in frozen form.

3. Shrimp are taken for the most part in otter trawls ranging in size from 12 to 110 ft (measured as the width along the headrope) depending on the size and power of the individual boat.

**8. Find out the Degree of Comparison of the adjectives and adverbs in the following sentences:**

1. Most sockeye and pink are canned, and coho and chinook much less frequently.

2. Norway is the fifth largest producer of fish products in the world.

3. The sea scallop is subject to pollution problems and possibly even more devastating is destruction of its natural habitat.

4. A conveyor moves the shrimp to an inspection station where inspectors further remove trash, ice and decomposed shrimp.

5. The American smelt is a lean fish with a fat content no greater than 5%.

**9. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**10. Put all possible questions to the following sentences:**

1. In a few instances shrimp boats are equipped with refrigerated sea water in which the shrimp are held at 35°-40°F.

2. On the Atlantic coast, the migration takes place in the fall when smelt invade bays.

## **Unit XXIII**

**1. Vocabulary:**

Diversification-

разнообразие, многообразие, расширение ассортимента

wiener-

копчёная сосиска

encounter-	(неожиданно) встретить
uncohesive-	несвязанный, не способный к сцеплению
mince-	резать, рубить на мелкие куски, пропускать через мясорубку
dressed form-	приготовленная форма
dispersion-	рассредоточение, распространение, распространённость
fluctuate-	колебаться, колыхаться
line-	строить, правильно устанавливать
jetty-	мол, дамба, пристань, пирс
hut-	строение, барак
run-	1) стая, косяк 2) прилив, приток (воды)
ardent-	страстный
festivity-	празднество, веселье
planting-	разведение, внедрение
hold-	хранилище
mesh bag-	сетка-мешок

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

product diversification	сосредоточение
less readily	крючок с приманкой
breaded form	верфь, причал, пристань
precooked form	расширение ассортимента продуктов
(товаров)	
concentration	весенний прилив
wharf	менее охотно, с меньшей
ГОТОВНОСТЬЮ	
baited hook	продукт, обвалянный в панировочных
сухарях	
spring run	полуфабрикат

## **Smelt. Utilization**

Research directed towards greater product diversification and total use of the smelt harvest has been undertaken by government agencies and to a limited degree by the industry.

Government workers have directed investigations in areas of product development such as examining methods of utilizing the smaller, less readily marketable smelts which are caught incidentally during fishing

operations, and new products in line with modern marketing philosophy with the intent to increasing the resource value. This type of research has been undertaken in large part by the Fisheries Research Board of Canada and has included examining the nutrient constituents of smelt; the potential of smelt processed as a canned sardine-style product, smoked, packed with oil, and packed with various sauce mediums; and experimental processing of sausage and wiener products using smelt flesh as the primary raw ingredient. Problems were encountered with this latter type of product because of the uncohesive characteristics of the flesh and a grey unappealing discoloration taking place when minced, due to the homogenization of the dark pigments present in various areas of the fish. It was found, however, that smelt flesh combined with the flesh of other, more suitable fish would produce a product with acceptable texture and color characteristics.

Industry has concentrated largely on developing and marketing processed products in the fresh or frozen dressed form and the fresh or frozen breaded and precooked form.

## **General Biology**

Studies have been conducted by the Department of Lands and Forests of the Province of Ontario towards determining: distribution patterns in Lake Erie according to various age groups throughout the year and evaluation of the significance of the movement of smelt concentrations and dispersions; the relationship between water depth, temperatures, and oxygen concentrations; spawning habits and locations and the effect of fluctuating water levels and rainfall on mortality; the phenomenon of successful reproduction on alternate years; diseases that may affect spawning, growth, and mortality.

## **Sport Fishery**

Wherever smelt are present, sport fishermen are there to exploit them. The fishery is varied. On the east coast, sport fishermen line wharves and jetties in the fall to catch smelt with baited hooks. In the winter time, huts are moved on to the ice and smelt are caught again with baited hook through holes in the ice. A famous area for such ice fishing is Little Bay de Noc of Lake Michigan.

The sport fishery on Lake Erie is in connection with the spring run, usually in April. Thousands and thousands of ardent fishermen, groups, and families invade the beaches in the evening, harvesting smelt

with beach seines, dip nets, and any type of gear that can hold small fish. Smelt are so abundant at times that they simply roll to the beach. It is a time of festivities that can go on well into the night but as soon as the water starts warming up, the spring run is over and the fans put their gear away for another year. The same spectacle is re-enacted on the shores of Lake Michigan and on the shores of the Columbia River on the West coast. The smelt is a species which definitely adds to the pleasures of sport fishing.

**3. Translate the sentences paying attention to the peculiarities of translating the chains of nouns.**

1) The value of the fishery increased considerably in Lake Erie with the introduction of trawling gear, causing a corresponding decrease in the value of the marine fishery on the east coast.

2) These two governments cooperated in a gear development program to improve the smelt fishery in Lake Erie.

3) Echo sounding and trawling gear were used to locate smelt concentrations.

4) Smelts are transferred to holding tanks aboard the fishing vessel.

**4. Translate the chains of nouns:**

smelt eggs	Ontario Government
east shore	market demands
spawning run	processing plant
north shore	fishing boat
year-round fishing	batch level
smelt reproduction	processing continuity
processing operations	trawl load

**5. Determine grammar forms:**

has been undertaken	is varied
are caught	fluctuating water
canned sardine-style product	may affect
have directed	was found
were encountered	greater product

diversification

more suitable	adds
---------------	------



can hold

**6. Translate the following sentences into Russian. Find out the Tense and Voice of the predicates.**

- 1) In the larval stages, plankton eaters will take their toll.
- 2) The meats are washed and put in muslin bags which hold about 35lb.
- 3) Earliest plantings were in the St. Mary's River in 1905-1906 where smelt eggs from the Atlantic coast were deposited.
- 4) The high temperature of the Gulf of Mexico waters contributes to the degradation process while shrimp are in the trawl.
- 5) The smelt became established and started spreading out to different parts of Lake Michigan.
- 6) Up to then the fishery had been a seasonal operation limited to about six weeks which produced a glut on the market.
- 7) A method which prevents the problems has been proposed and has been successfully tested by the Fisheries Research Board of Canada.

**7. Find out the functions of the Participles in the following sentences:**

- 1) There aren't any particular organisms causing losses from disease.
- 2) Washed shrimp are placed in a mesh bag and immersed in the solution until the shrimp are frozen.
- 3) The hold is held at a temperature just above freezing to allow the ice to melt thereby washing away bacteria and enzymes.
- 4) Smelt acquire distorted shapes when stored in ice previous to processing, making it difficult to sort out and to process by automatic machinery.
- 5) The peeled shrimp are sold as raw "peeled and deveined" or "cooked peeled" shrimp.

**8. Determine the functions of the Infinitives.**

- 1) The Research Laboratory of the Norwegian Canning Industry was founded in 1931 to assist in the developing of new product.
- 2) The annual catch appears to be stabilized at about 12 million pounds per year.
- 3) All shell segments and the fantail are removed from shrimp to

be used in canned shrimp.

### 9. Find out the Degrees of Comparison:

- 1) From 1878 canned fish goods became more important.
- 2) The greatest volume of shellfish comes from salt water sources.
- 3) The smelt market recognizes 3 grades: shorter than 4 in., classified as small; fish up to 7 in., called number ones; and larger fish rated as extras.
- 4) The Norwegian Canning School represents one of the most recent advances in industrial thinking.
- 5) Trawling for smelt is now a well-established operation on Lake Erie, leading to better processing continuity and better quality.

### 10. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.

### 11. Put all possible questions to the sentence:

A conveyor moves the shrimp to an inspection station where inspectors further remove trash, ice, and decomposed shrimp; shrimp are then conveyed into the processing plant.

## Unit XXIV

### 1. Vocabulary:

evolve-	развиваться, превращаться
smolder-	тлеть; медленно, бездымно гореть
decompose-	разлагать(ся), распадаться
literally-	буквально, дословно; без преувеличения
dissolve-	растворяться, разрушаться
condense-	превращаться
distill-	очищать(ся), гнать
relative-	условный, относительный
treatment-	обработка
drastically-	решительно, круто, радикально; коренным
образом	
expose-	помещать, ставить
sawdust-	древесные опилки

excelsior-	мягкая древесина, стружка
chip-	щепка
advanced-	передовой, прогрессивный
smoke generator-	коптильный котёл
kiln-	промышленная печь
duct-	капилляр
chamber-	полость, камера
supplant-	вытеснять, выживать, занимать чьё-л.

место

generation-	образование
friction-	трение
deposition-	показание
fluidize-	превращать в жидкость или газ
diversification-	расширение ассортимента
wiener-	копчёная сосиска
seine-	сеть
run-	прилив
planting-	внедрение (подсаживание) мальков в

водоём

spawning run-	период размножения
refrigerant leak-	утечка хладагента

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

lignin	уменьшение, деградация
hardwood	обработка продуктов
droplet	коптильня периодического

действия

a smoke house	ЛИГНИН
degradation	твёрдая древесина
treatment of foods	капелька
a batch type smoke house	КОПТИЛЬНЯ

## Smoking process

The practice of smoking meat and fish over open fires comes down to us from prehistoric ancestors. The food could be both cooked and preserved by this simple treatment. In spite of the fact that refrigeration and canning have removed the necessity of heavy smoking as a preservative, lightly smoked foods are still highly popular, mainly because of their flavor.

As with many other ancient practices, the art of smoking is evolving rather slowly into a science. The slowness is perhaps not too surprising, considering the complexity of smoke. Within the smoldering mass, the celluloses, hemicelluloses and lignins of the hardwoods thermally decompose. The resulting clouds of smoke consist of invisible vapors within which float visible particles and droplets. Literally hundreds of chemical degradation products are distributed in the vapor, dissolved in the water droplets, or condensed on solid particles. The physical distribution is constantly changing; compounds continue to distill from particle to vapor phase or vice versa. Many of the physical parameters of the system (type of wood, temperature, moisture, oxygen supply, etc.) can affect not only the total amount of smoke but also the relative concentrations and distribution of components.

The actual treatment of foods with natural smoke has not changed drastically from olden times. In many places to-day the meat or fish is simply exposed in a smoke house over smoldering sawdust, chips, or excelsior. More advanced technologies use smoke generators or kilns in which burning conditions can be at least partially controlled and the smoke led through ducts to a chamber containing the exposed foods. Continuous operations may supplant the batch type smoke house. Other innovations include generation of smoke from logs by friction, electrostatic deposition of smoke, and the experimental use of inert gas to fluidize the sawdust, followed by a controlled oxidation.

**3. Translate the following sentences paying attention to the peculiarities of translating the chains of nouns.**

1) Research directed towards greater product diversification and total use of the smelt harvest has been undertaken by government agencies.

2) Government workers have directed investigations in areas of product development such as examining methods of utilizing the smaller smelts which are caught incidentally during fishing operations, and new products in line with modern marketing philosophy with the intent to increasing the resource value.

3) Studies have been conducted towards determining: distribution patterns in Lake Erie according to various age groups throughout the year and evaluation of the significance of the movements of smelt concentrations and dispersions; the relationships between water depth, temperatures, and oxygen concentrations; spawning habits and locations and the effect of fluctuating water levels and rainfall on mortality.

**4. Translate the chains of nouns:**

sausage and wiener products	smelt flesh
texture and color characteristics	sardine-style product
ice fishing	winter time
sport fishermen	beach seines
spring run	sport fishing

**5. Determine grammar forms:**

smoked foods	is evolving
the art of smoking	could be cooked
has not changed	are exposed
the smoldering mass	comes down

**6. Translate the following sentences into Russian. Find out the Tense and Voice of the predicates.**

1) For sea scallops, tumbler dredges (which will fish either side up) have been the gear of choice.

2) The time is critical from death of the shrimp until they are placed on ice.

3) Plantings were continued at different locations during succeeding years and apparently one of the most successful plantings was in Crystal Lake on the east shore of Lake Michigan.

4) The marine species migrates to streams for spawning, and the commercial fishery is based on that migration.

5) In lake Erie, production used to be based on the spawning run taking place mainly on the north shore of the lake.

6) This type of research has been undertaken by the Fisheries Research Board of Canada and has included examining the nutrient constituents of smelt.

**7. Find out the functions of the Participles in the following sentences:**

1) There is a possibility of a refrigerant leak endangering the lives of the crew and contaminating the catch with the refrigerant.

2) This method provides individually frozen shrimp which are then glazed and packed in cartons.

3) The refrigerated sea water shifts in the boat during rough seas increasing the likelihood of capsizing the boat.

4) Sodium bisulfate is used as a dipping solution.

5) Problems were encountered with smelt because of a grey unappealing discoloration taking place when minced.

6) The refrigerated sea water must be changed frequently, increasing the cost over ice-held shrimp.

**7) Determine the functions of the Infinitives and Infinitive Constructions in the following sentences:**

1) A special knife is used to separate the shells and cut the adductor muscle.

2) If a trawl load appears to be mainly very small fish it is immediately rejected.

3) These two governments cooperated in a gear development program to improve the smelt fishery in Lake Erie.

4) The hold is held at a temperature just above freezing to allow the ice to melt thereby washing away bacteria and enzymes.

**8) Find out the Degrees of Comparison in the following sentences:**

1) Norway sardine delicacy is served by the most discriminating chefs the world over.

2) Earliest plantings were in the St. Mary's River in 1905-1906.

3) The installation of mechanical freezing equipment on boats is becoming more prevalent.

**9) Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**10) Put all possible questions to the following sentences:**

1) Small catches are made by means of gill nets in early fall.

2) On the Atlantic coast, the migration takes place in the fall when smelts invade bays.

## Unit XXV

### 1. Vocabulary:

conventional-	обычный, традиционный
departure-	отклонение, уклонение
constituent-	элемент, составная часть, составляющая
acid-	едкий, острый
improvement-	усовершенствование
tarry-	дѣгтеобразный, смолистый, просмоленный
derivative-	производное
residue-	осадок, остаток
hydrocarbon-	углеводород
approved-	испытанный, апробированный
lieu-	вместо
implicate-	подразумевать
casing-	оболочка
frankfurter-	сосиска (амер.)
restrict-	ограничить
attribute-	приписывать; качество, свойство
generate-	порождать, образовывать
charcoal-	древесный уголь
broiled-	жареный на открытом огне
setting-	установление
totebox-	стальной поддон
proliferate-	размножаться, распространяться
run-	прилив

### 2. Match the English words and phrases from the first column with their Russian equivalent in the second one.

promising	нагретый газ
pyrogenous acid	многоядерные (полициклические)
углеводороды	
controlled	регулируемое окисление
patent	канцероген, канцерогенное вещество
extract	многообещающий, перспективный
bottled smoke	предельный лимит безопасности
polycyclic hydrocarbons	пирокислота
carcinogen	регулируемый
heated gas	диплом, патент

controlled oxidation  
upper limit for safety

БУТЫЛОЧНОЕ КОПЧЕНИЕ  
ЭКСТРАГИРОВАТЬ, ИЗВЛЕКАТЬ

## **Smoking process**

The most promising departure from conventional procedures appears to be the development of “liquid smokes” i.e., solutions of smoke constituents in water or oil. Water-based preparations have been available for more than 20 yr, but recent offerings are great improvements over the older, acrid, tarry “pyroligenous acid” derivatives. Smoke from a controlled generator is led through water to give “natural smoke flavorings” which may be further modified to remove tarry residues, traces of hydrocarbons, etc. Oil-based smokes, described in a 1969 patent to C. M. Hollenbeck and now available commercially, are prepared by extracting the water solutions with a vegetable oil. These bottled smokes should allowed much more rapid progress in identifying, measuring, and controlling desirable and undesirable components of smoke and in simplifying the process of smoking foods. Properly labeled, i.e., “smoke flavoring added,” foods treated with approved liquid smokes in lieu of, or in addition to, the natural smoking process, are acceptable to government regulatory agencies.

The most dangerous known components of natural smokes are polycyclic hydrocarbons, several of which have been implicated as carcinogens. The main carcinogen found in smoke and smoked foods is benzopyrene, present in whole smoke from smoldering wood and in lesser quantities in the vapor phase. The amount present in smoked foods varies from essentially zero to values of 50-60 mg. per kg. Cold-smoked products have less than hot-smoked products, and in the newer (largely experimental) processes involving heated gas followed by controlled oxidation, the smoke is practically free of this carcinogen. Cellulose casings, used for example, during processing of skinless frankfurters and later peeled off, have been found to restrict entrance of hydrocarbons while allowing the passage of other smoke constituents. All polycyclic hydrocarbons are removed from approved liquid smokes.

The possible consequences to health of carcinogens in smoked food are difficult to evaluate. In regions where heavily smoked fish and meat are a major component of the diet (Iceland has been most thoroughly investigated), a corresponding high incidence of stomach cancer has been observed. In the United States, on the other hand, stomach cancer has been decreasing for several decades, as contrasted to large increases in lung



cancer attributed to cigarette smoking and air pollution. Toxic hydrocarbons are rather widespread in the environment. Shellfish from waters polluted with petroleum oils concentrate these carcinogens to values many times those of smoked meat and fish. Vegetables grown near urban areas can be heavily contaminated from polluted air. Thermal decomposition of any food is likely to generate these hydrocarbons; charcoal broiled steaks and even roasted coffee have been shown to contain them in variable amounts. The setting of an upper limit for safety is complicated by the fact that their carcinogenic effect can be greatly increased by other components of the diet, including phenols and certain metals.

**3. Translate the chains of nouns:**

smoke house	chemical degradation products
water droplets	smoke generator
vapor phase	batch type smoke house

**4. Determine grammar forms:**

is led	may be further modified
oil-based smokes	are prepared by extracting the water solutions
should allow	much more rapid progress
most dangerous	have been implicate
smoldering wood	carcinogen found in smoke
in lesser quantities	cold-smoked products
have been found	

**5. Translate the following sentences into Russian. Find out the Tense and Voice of the predicates.**

1. After the scallops become bottom dwellers, sponges, snails, starfish, and bottom feeders such as cod will weaken or consume the young scallops.

2. This method provides individually frozen shrimp which are then glazed and packed in cartons.

3. Echo sounding and trawling gear were used to locate smelt concentrations and to determine the type of gear which could economically be used.

4. Studies have been conducted by the Department of Lands and Forests towards determining diseases that may affect spawning, growth, and mortality.

5. The Division of Fish and Wildlife of Ontario developed specially

designed toteboxes with removable polyethylene liners for holding smelt.

6. Industry has concentrated largely on developing and marketing processed products in the fresh or frozen form.

**6. Determine the functions of the Participles in the following sentences:**

1. Proliferating enzymes in the head are responsible for the spoilage which is referred to as “melanosis”.

2. Shrimp frozen and packaged at sea are unloaded at a dock side and placed directly in a holding freezer.

3. The mechanical peeler removes the heads and shells leaving only the meats.

4. This type of research has included examining the smelt processed as a canned sardine-style product, smoked, packed with oil; and experimental processing of sausage using smelt flesh as a primary raw ingredient.

5. In Lake Erie, production used to be based on the spawning run taking place mainly on the north shore of the lake.

6. **Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

7. **Put all possible questions to the following sentence:**

In the Great Lakes, the fishery is also connected with the spring run, except in Lake Erie where the fishery lasts all year round.

## Unit XXVI

### 1. Vocabulary:

attribute-	качество, свойство, приписывать
paramount-	первостепенный, верховный, высший
correlation-	соотношение, взаимосвязь
odor-	запах, аромат, привкус
low odor threshold-	преддверие слабого аромата (привкуса)
whereas-	хотя, тогда как, в то время как
retard-	замедлять, задерживать, запаздывать
rancidity-	прогорклость
inhibit-	сдерживать, подавлять, останавливать
account for-	отвечать за
fraction-	отрезок, доля

mold = mould-	плесень
constituent-	элемент, составная часть
ester-	сложный эфир
acetic acid-	уксусная кислота
decomposition-	разложение, распад, гниение
encounter-	неожиданно встретить
condensate-	сгуститель, уплотнитель

**2. Match the English words and phrases from the first column with their Russian equivalents in the second one.**

antioxidant activity	общая, всеобъемлющая активность
bologna	дублировать, воспроизводить, удваивать
carbonyl	муравьиная кислота
duplicate	явный, резко выраженный запах
pronounced odor	действие антиокислителя
overall activity	карбонил; окись углерода, угарный газ
formic acid	болонская копчёная кислота

### **Attributes of Wood Smoke**

The desirable attributes of wood smoke, i.e., flavor, antioxidant activity, and bactericidal effect, seem to be associated with phenolic fractions of the smoke. Flavor is of paramount importance; this is the main reason for smoking in modern times. Researchers at Michigan State University have found a good correlation between the phenolic content and smoke odor in successive layers of smoked bologna, whereas carbonyls and acids in the smoked meat were no higher than in the unsmoked. USDA workers demonstrated that a smoke fraction responsible for most of the aroma contained most of the phenolics, but such fractions are still complex and not limited to phenolic compounds. Further attempts by this and other groups to duplicate natural smoke aroma by combining a number of pure phenolic derivatives having low odor thresholds and known to be present in smoke have not been highly successful. It may be that many compounds, including carbonyls and acids as well as phenols, may contribute to the flavor and aroma.

Liquid smokes as well as the natural smoking process, retard the development of rancidity and inhibit microorganisms. Again, phenolic fractions are known to be involved, but there has been little work on the evaluation of individual smoke components. Guaiacol ( 2-methoxyphenol),

present in fairly large concentrations in smoke, has bactericidal and antioxidant effects, as well as a pronounced odor. But this compound alone can account for only a fraction of the overall activity of wood smoke.

It should be emphasized that the mild smoke treatment usually given meats or fish in this country is not sufficient to preserve them at ordinary temperatures or to decrease significantly heat or cold treatment required for preservations. Marketing of smoked fish in vacuum packed bags without refrigeration resulted in several deaths and a number of cases of illness from Type E botulism in 1963. Mold growth and bacterial spoilage occur quite readily on such products when exposed to air.

A true picture of the effect of smoke is further complicated by the fact that many smoke constituents can react with each other and with food components. Extensive formation of esters from reactions of methanol with formic and acetic acids in smoke condensates has been observed by USDA scientists. Studies at Wageningen, Holland, related the typical reddish brown color of smoked foods to interactions between smoke aldehydes and food amino acids and proteins. Glyoxal, methyl glyoxal and glycolic aldehyde were markedly active in color development with glycine, and the concentration of these aldehydes in water decreased rapidly upon addition of amino compounds. Other reactions, for example between phenols and sulfhydryl groups, or Strecker type degradation of amino acids to aldehydes and other decomposition products, might also be expected. The extent of such secondary smoke reactions and their contribution to important smoke attributes, remain almost unexplored.

**3. Translate the chains of nouns:**

smoke odor	Michigan State University
natural smoke aroma	mold growth
food amino acids	smoke constituents
color development	

**4. Determine grammar forms:**

have been shown	higher
are known to be involved	have found
is complicated	has been observed
polluted air	might be expected
demonstrates	

**5. Translate the following sentences into Russian. Find out the Tense and Voice of the predicates.**

1. Shrimp that are not handled properly will develop “black spots” on shell segments.

2. In spite of the fact that refrigeration and canning have removed the necessity of heavy smoking as a preservative, lightly smoked foods are still highly popular.

3. As with many other ancient practices, the art of smoking is evolving rather slowly into a science.

4. Problems were encountered with this type of product because of a grey unappealing discoloration of the flesh.

5. The most dangerous known components of natural smokes are polycyclic hydrocarbons, several of which have been implicated as carcinogens.

6. It was found that smelt flesh combined with the flesh of other fish would produce a product with acceptable texture and color characteristics.

7. Literally hundreds of chemical degradation products are distributed in the vapor; the physical distribution is constantly changing.

8. The value of the fishery increased considerably in Lake Erie with the introduction of trawling gear.

9.

**6. Put questions to the every paragraph of the text so that to express the main idea of the paragraph.**

**7. Put all possible questions to the following sentence:**

The Canadian Federal Government carries out biological research on smelt on the east coast.

# ПРИЛОЖЕНИЕ

## ГРАММАТИЧЕСКИЙ СПРАВОЧНИК

### § 1. Существительное в функции определения

В английском языке существительные в функции определения часто употребляются в именительном падеже. Структура «существительное + существительное» вызывает трудности при переводе.

Следует помнить, что главным словом в такой группе является последнее существительное, а существительное (или существительные), стоящее перед ним, является определением к нему и переводится прилагательным или существительным в косвенных падежах:

- a table lamp — настольная лампа
- a lamp table — столик для лампы
- food department — продовольственный отдел
- railway line — железнодорожная линия
- products price decrease — снижение цен на продукты
- chicken soup — куриный суп

### § 2 Глагол *to be*

#### Глагол *to be* в Present Simple

Утвердительная форма	Отрицательная форма	Вопросительная форма
I am You are	I am not/I'm not You are not/aren't	Am I ...? Are you ...?
He is She is It is	He is not/isn't She is not/isn't It is not/isn't	Is he ...? Is she ...? Is it...? 107
We are	We are not/aren't	Are we ...?
You are	You are not/aren't	Are you ...?
They are	They are not/aren't	Are they ...?

#### Многозначность глагола *to be*

Глагол **to be** многозначен и может выполнять в предложении

следующие функции:

- глагол, указывающий на местонахождение предмета:

The table **is** in the middle of the room. Стол находится посередине комнаты.

- глагол-связка:

The soup **is** hot. Суп горячий.

- модальный глагол. **To be** + инфинитив выражает необходимость совершить действие согласно предварительной договоренности, по плану:

**This task is to be** made by 7 o'clock.

Задача должна быть выполнена к 7 часам.

- вспомогательный глагол:

а) для образования времен группы Continuous:

Look! Children **are playing** in the yard! Посмотрите! Дети играют во дворе!

б) для образования страдательного залога:

Cheese **is made** from milk. Сыр делают из молока

### Глагол *to be* в Past Simple

<i>Утвердительная форма</i>	<i>Отрицательная форма</i>	<i>Вопросительная форма</i>
I was	I was not/ I wasn't	Was I ...?
We were	We were not/ we weren't	Were we...?
You were	You were not/you weren't	Were you...?
She was	She was not/ she wasn't	Was she ...?
He was	He was not/ he wasn't	Was he ...?
It was	It was not / it wasn't	Was it ...?
They were	They were not/they weren't	Were they...?

### Глагол *to be* в Future Simple

<i>Утвердительная форма</i>	<i>Отрицательная форма</i>	<i>Вопросительная форма</i>
I shall be (will be)	I shall not be/shan't be (will not be/won't be)	Shall I be...?(Will I be...?)
We shall be (will be)	We shall not be/shan't be (will not be/won't be)	Shall we be...?(Will we be...?)
You will be	You will not be/won't be	Will you be...?
He will be	He will not be/won't be	Will he be...?
She will be	She will not be/won't be	Will she be...?
It will be	It will not be/won't be	Will it be...?
They will be	They will not be/won't be	Will they be...?

Задание на усвоение изученного грамматического материала.

*I. Переведите на английский язык, употребляя глагол to be в Present, Past или Future Indefinite.*

1. Моя сестра сейчас в магазине.
2. Мы были вчера в кино.
3. Наш преподаватель будет завтра в университете.
4. Ты будешь дома завтра?
5. Вы были вчера в парке?
6. Он сейчас во дворе?
7. Мы не были на юге прошлым летом.
8. Они не будут завтра дома.
9. Наши соседи сейчас не в Ростове. Они в Новосибирске.

*II. Переведите на английский язык, определите функцию глагола to be.*

1. Мой дом находится недалеко от центра города.
2. Преподаватель занят.
3. Текст должен быть переведен завтра.
4. Студенты написали контрольную работу на прошлой неделе.
5. Дом был построен две недели назад.

*III. Раскройте скобки, выбрав необходимую форму глагола:*



1. Her son (to be) an agronomist.  
a) am    b) is    c) are    d) was
2. Her brother (to be) a student last year.  
a) am    b) is    c) are    d) was
3. My sister (to be) an economist in a year.  
a) was    b) is    c) will be    d) shall be
4. I (not to be) tired.  
a) am    b) is    c) was    d) shall be
5. (To be) you hungry?  
a) is    b) are    c) was    d) were
6. Where (to be) you yesterday?  
a) is    b) are    c) was    d) were
7. The weather (not to be) cold today.  
a) is    b) are    c) was    d) were
8. (To be) you at home tomorrow?  
a) Are    b) will be    c) shall be    d) were

### §3 Глагол *to have*

#### Глагол *to have* в Present Simple

Утвердительная форма	Отрицательная форма	Вопросительная форма
I have	I have not/haven't	Have I ...?
You have	You have not/haven't	Have you ...?
He has	He has not/hasn't	Has he ...?
She has	She has not/hasn't	Has she ...?
It has	It has not/hasn't	Has it ...?
We have	We have not/haven't	Have we ...?
You have	You have not/haven't	Have you ...?
They have	They have not/haven't	Have they ...?

Глагол **to have** в разговорной речи часто заменяется конструкцией **to have got**:

I have got a car. / I've got a car - У меня есть машина.

I have not / haven't got a car. = I have no car. Have you got a car? – У тебя есть машина?

Yes, I have. — Да.

Yes, I've got it. — Да, у меня она есть.

No, I haven't. — Нет.

No, I haven't got it. — Нет, у меня ее нет.

Has he got a car? — У него есть машина?

Yes, he has. — Да.

Yes, he has got it. — Да, у него она есть.

No, he has not. — Нет.

No, he hasn't got it. — Нет, у него ее нет.

В сочетании с некоторыми существительными глагол **to have** утрачивает свое основное значение и приобретает новое:

to have breakfast — завтракать

to have a snack — перекусить

to have dinner — обедать

to have a rest — отдыхать

to have supper — ужинать

to have tea/coffee — пить чай/кофе

Отрицательная и вопросительная формы в этом значении образуются при помощи вспомогательного глагола do:

Do you have lunch at home? — I don't have lunch at home.

### **Многозначность глагола *to have***

Глагол **to have** многозначен. В предложении глагол **to have**

- означает *иметь, обладать*:

I have a sister. У меня есть сестра.

**To have got** также означает *обладать*:

He has got a lot of books. У него много книг.

- имеет модальное значение, если после глагола **to have** следует инфинитив. В этом случае он выражает долженствование, а именно необходимость совершить действие в силу определенных причин:

You **have to go** shopping. Тебе придется сходить за покупками.

He **had to do** the work as soon as possible.

Он должен был закончить работу как можно раньше.

- используется как вспомогательный глагол группы времен

Perfect:

We have finished the work. Мы закончили работу.

### Задание на усвоение изученного грамматического материала.

I. Переведите на английский язык, употребляя глагол *to have* в *Present, Past или Future Indefinite*.

1. У меня вчера был экзамен по иностранному языку.
2. У тебя будет свободное время завтра?
3. Мы обычно завтракаем в 8 утра.
4. Мы будем отдыхать в Сочи следующим летом.
5. У него есть прекрасный дом недалеко от Ростова.

*II. Переведите на английский язык, определите функцию глагола to have.*

1. У него есть новая машина.
2. Нам придется выполнить эту работу самостоятельно.
3. Вы должны были прочитать это произведение до конца..
4. Мы уже перевели текст.
5. У меня есть хорошая работа в банке.

*III. Раскройте скобки:*

1. He (to have) some new computer discs.
2. We (to have) a test tomorrow.
3. They (to have) an examination session two weeks ago.
4. She (to have) many English magazines.
5. I (to have) this book next week.
6. (To have) she a little dog?
7. (To have) you a brother or a sister?

#### **§ 4. Типы вопросов**

***В английском языке существует 5 типов вопросов:***

1. Общий вопрос. Задается ко всему предложению. Ответ на общий вопрос всегда краткий (Да или нет).

Порядок слов в общем вопросе: вспомогательный глагол + подлежащее + остальные члены предложения.

2. Специальный вопрос. Задается к какому-либо члену предложения. Ответ на него всегда полный.

Порядок слов в специальном вопросе: вопросительное слово + общий вопрос без того слова, к которому вопрос задается.

3. Вопрос к подлежащему.

Порядок слов в вопросе к подлежащему: вопросительное слово ставится на место подлежащего, остальные члены предложения, как правило, не изменяются. После слов «**who**» и «**what**» глагол-сказуемое употребляется

в 3-м лице, единственном числе.

4. Альтернативный вопрос.

Схема альтернативного вопроса: состоит из двух частей: 1-я часть - общий вопрос, 2-я часть – альтернатива к какому-либо члену предложения в первой части. Соединяются две части союзом «или» («or»).

#### 5. Разделительный вопрос.

Схема разделительного вопроса: состоит из двух частей. 1-я часть – повествовательное предложение, 2-я часть – краткий общий вопрос к первой части (вспомогательный глагол + отрицательная частица (not) + местоимение, заменяющее подлежащее). Если первая часть разделительного вопроса отрицательная, то во второй части отрицательная частица не употребляется.

#### **Вопросительные слова для образования специальных вопросов:**

<b>when</b>	когда?	When do you usually get up?
<b>what</b>	что?	What do you see in the picture?
	какой?	What music does she like?
<b>where</b>	где?	Where does he study?
	куда?	Where do you go?
<b>who</b>	кто?	Who is that woman?
<b>whom</b>	кому?	Whom do you give your books?
	кого?	Whom do you see in the park?
<b>whose</b>	чей?	Whose book is that?
<b>which</b>	какой? который?	Which dress do you want to buy?
<b>how</b>	как?	How do you get to the college?
<b>how many</b>	сколько? (об исчисляемых существительных)	How many students are there in the classroom?
<b>how much</b>	сколько? (о неисчисляемых существительных)	How much bread is there on the plate?
<b>why</b>	почему?	Why do you always come late?

#### **Примеры вопросительных предложений**

*They come home late.*

1. Общий вопрос:

Do they come home late?

2. Специальный вопрос:

When do they come home?

Why do they come home late?

3. Вопрос к подлежащему:

Who comes home late?

4. Альтернативный вопрос:

Do they come home early or late?

5. Разделительный вопрос:

They come home late, don't they?

Краткие ответы:

Do you study at college? — Yes, I do. / No, I don't.

Does he work every day? — Yes, he does. / No, he doesn't.

Задание на усвоение изученного грамматического материала.

I. *Задайте по пять вопросов к каждому предложению*

1. He is writing a composition now.

2. Mary has bought a new hat.

3. My aunt works at the shop three times a week.

4. His cousin will live in Moscow next year.

5. I bought a pair of gloves yesterday.

II. *Переведите вопросительные предложения на английский язык.*

1. Почему ты всегда опаздываешь на занятия?

2. Кто вчера перевел этот текст?

3. Вы посетили музей в Ростове или в Новочеркасске?

4. Она придет завтра на экзамен?

5. Студенты уже сдали сессию, не так ли?

III. *Задайте вопросы к выделенным словам, переведите предложения на русский язык.*

1. **A great number of students** were studying **in the reading-room** when I entered it **last evening**.

2. He came **home at five o'clock** yesterday.

3. I always get up at eight o'clock, but **tomorrow** I will get up **a little later**.

4. **The rain** has already stopped.

5. We have **much time** for translating this text.

## § 5. Конструкция *there is/there are*.

Конструкция **there is/there are** указывает на наличие (отсутствие) предмета или лица в определенном месте и переводится словами *есть, имеется, находится, лежит, стоит* и т.п. или не переводится.

При переводе на русский язык на первое место выносятся обстоятельство места:

+ There is a plate on the table. На столе стоит тарелка.

There are plates on the table. На столе стоят тарелки.

— There is no plate on the table. =There isn't a plate on the table. На столе нет тарелки.

There are no plates on the table. =There aren't (any) plates on the table. На столе нет (никаких) тарелок.

? Is there a plate on the table? На столе есть тарелка?

Are there (any) plates on the table?

На столе есть (какие-нибудь) тарелки?

При наличии нескольких однородных подлежащих глагол **to be** обычно согласуется в числе с первым подлежащим:

There **is** a napkin, plates and cups on the table. There **are** plates, cups and a napkin on the table.

Если после конструкции **there is/there are** стоит неисчисляемое существительное или существительное во множественном числе, вместо опущенного неопределенного артикля часто употребляется слово **some**:

There **are** some newspapers on the table. На столе лежат газеты.

There **is** some tea in the cup. В чашке есть чай.

### Задание на усвоение изученного грамматического материала.

I. *Переведите предложения на английский язык.*

1. В нашем саду есть много фруктовых деревьев.

2. На подоконнике нет цветов.

3. В классе находилось 12 студентов старшего курса.

4. В вашем дворе есть (какие-нибудь) машины?

5. В сумке находились тетради, учебники и несколько ручек.

6. В кошельке есть деньги?

II. *Подберите правильный перевод предложений*

1. В тексте – несколько абзацев.

a) There were some paragraphs in the text.

b) There are some paragraphs in the text.

- c) Some paragraphs are in the text.
- d) Some paragraphs were in the text.

2. В книжном шкафу есть несколько словарей.

- a) There is a dictionary in the bookcase.
- b) There was a dictionary in the bookcase.
- c) There are some dictionaries in the bookcase.
- d) There were some dictionaries in the bookcase.

3. В аудитории было много студентов.

- a) There are many students in the classroom.
- b) There were many students in the classroom.
- c) Many students there are in the classroom.
- d) Many students are in the classrooms.

4. На полке лежал журнал.

- a) There is a magazine on the shelf.
- b) There was a magazine on the shelf.
- c) There will be a magazine on the shelf.
- d) There were magazines on the shelf.

5. В комнате кто-то был.

- a) Somebody was in the room.
- b) There is somebody in the room.
- c) There was somebody in the room.
- d) There were somebody in the room.

## § 6. The Pronoun (Местоимение)

### Личные, притяжательные и возвратные местоимения

Личные				Притяжательные			Возвратные	
Именительный падеж		Объектный падеж		Зависимая форма	Независимая форма			
I	я	me	мне, меня	my	mine	мой	myself	себя, сам
you	ты	you	тебе	your	yours	твой	yourself	себя, сам
he	он	him	ему, его	his	his	его	himself	себя, сам
she	она	her	ей, ее	her	hers	ее	herself	себя, сама
it	(неодуш.)	it	ему, его, ей	its	its	его, ее	itself	себя, сам(а)
we	мы	us	нам, нас	our	ours	наш	ourselves	себя, сами
you	вы	you	вам, вас	your	yours	ваш	yourselves	себя, сами
they	они	them	им, их	their	theirs	их	themselves	себя, сами

### Указательные местоимения

Единственное число	Множественное число
this — этот, эта, это	these — эти
that — тот, та, то	those — те

### Неопределенные местоимения

<b>Some, something, Somebody(=someone)</b>	<b>Any, anything, anybody, (=anyone)</b>	<b>No, nothing, nobody, (=no one)</b>
Утвердительное предложение	Вопросительное и отрицательное предложение	Отрицательное предложение
He brought some news. Он принёс новости	Did he bring any news? He didn't bring any news.	He brought no news.
Someone knows his address. Кто-то знает его адрес.	Does anyone know his address?	Nobody knows his address.

+ I've got some English books.  
английских книг.

У меня есть несколько



— I haven't got any English books. У меня нет (никаких) английских книг.

I have no English books. У меня нет английских книг.

Have you got any English books? У тебя есть какие-нибудь английские книги?

**Примечание:** **Some** может употребляться в вопросительных предложениях, если вопрос является приглашением или просьбой:

Would you like some tea? Не желаете ли чая?

May I have some coffee? Можно заказать кофе?

**Any** в утвердительном предложении имеет значение *любой*:

I can answer any question. Я могу ответить на любой вопрос.

I am ready to go anywhere. Я готов ехать куда угодно.

+ Give me **something** for a sweet. Дайте мне что-нибудь на десерт.

I can see **somebody** there. Я вижу там кого-то.

They usually go **somewhere** for the weekend.

Они обычно ездят куда-нибудь на выходные.

— There is **nothing** for a sweet. На десерт ничего нет.

There is **nobody** there. Там никого нет.

They go **nowhere** for the weekend. Они никуда не ездят на выходные.

? Would you like **anything** for a sweet? Не желаете чего-нибудь на десерт?

Can you see **anybody** there? Вы там видите кого-нибудь?

Will you go **anywhere** for the weekend?

Вы поедете куда-нибудь на выходные?

**ЗАПОМНИТЕ:**

В английском предложении может быть только одно отрицание:

They **never go anywhere**. Они никогда никуда не ходят.

She **never knows anything**. Она никогда ничего не знает.

Задание на усвоение изученного грамматического материала.

I. Вставьте местоимения *some, any, no*.

1. Are there...pictures in your book?
2. The students brought ...books from the library.
3. There is...coffee in the cup. The cup is empty.
4. Do you want...sugar in your cup?
5. There are...people in the garden, because it is cold.

*II. Переведите предложения на английский язык.*

1. У тебя есть какие-нибудь новые компьютерные игры?
2. Мои друзья никуда не ездили прошлым летом.
3. Любой студент может взять книгу в библиотеке.
4. Никто не смог перевести текст до конца.
5. Мы никогда не были в Лондоне.

*III. Выберите правильный вариант. ("somebody", "anybody", "nobody", "something", "anything", "nothing").*

1. Do you know ... here?
2. Is there ... at home? — No, there is ... in.
3. Kate, there is ... downstairs who wants to speak to you.
4. Is there ... else you would like me to explain to you?
5. I think there is ... strange about this woman.
7. ... interests my friend now.

**§ 7. СТЕПЕНИ СРАВНЕНИЯ ПРИЛАГАТЕЛЬНЫХ.**

Степень сравнения	Положительная	Сравнительная	Превосходная
Синтетическая (одно- и двусложные прилагательные)	<i>Hot</i> <i>Happy</i> <i>Long</i>	<i>Hotter</i> <i>Happier</i> <i>Longer</i>	<i>The hottest</i> <i>The happiest</i> <i>The longest</i>
Аналитическая (многосложные прилагательные)	<i>Interesting</i>  <i>Comfortable</i>	<i>More interesting</i>  <i>More comfortable</i>	<i>The most interesting</i>  <i>The most comfortable</i>

His room is bigger than your one. Его комната больше чем твоя.

This article is the most interesting in economic journal.

Эта статья самая интересная в экономическом журнале.

**Нетрадиционные формы степеней сравнения  
прилагательных  
(образуются от разных основ)**

Положительная степень	Сравнительная степень	Превосходная степень
<i>Good(хороший)</i>	<i>Better(лучше)</i>	<i>The best(самый лучший)</i>
<i>Bad(плохой)</i>	<i>Worse(хуже)</i>	<i>The worst(самый плохой)</i>
<i>Little(мало)</i>	<i>Less(меньше)</i>	<i>The least(меньше всего)</i>
<i>Much(много)</i>	<i>More(больше)</i>	<i>The most(больше всего)</i>
<i>Manу(много)</i>	<i>More(больше)</i>	<i>Fartherst/furtherst (дальше всего)</i>
<i>Far(далеко, далекий)</i>	<i>Farther/further(дальше)</i>	

His dictation is better than your one. Его диктант лучше, чем твой.

Your translation is the worst on the course. Твой перевод самый плохой на курсе.

\*При сравнении двух предметов неравной степени качества употребляется союз **than (чем)**, который следует за прилагательным или наречием в сравнительной степени.

Rostov is larger than Novocherkassk. Ростов больше чем Новочеркасск.

\*При сравнении двух предметов или явлений с одинаковой интенсивностью качества используется парный союз **as...as (такой же..., как и...)**

His composition is as interesting as mine. Его сочинение такое же интересное, как и мое.

\*При отрицании равенства качеств двух предметов используется парный союз **not so...as(не такой..., как...)**

Your house is not so high as mine. Твой дом не такой высокий как мой.

\*Слово **much** перед прилагательным или наречием в сравнительной степени переводится **гораздо**.

*Ann's translation is much more interesting. Анин перевод текста намного (гораздо)интереснее.*

\*Конструкция типа **the more... the better** переводится на русский язык при помощи парного союза **чем..., тем...**

The quicker you prepare for exam, the better. Чем быстрее ты подготовишься к экзамену, тем лучше.

Задание на усвоение изученного грамматического материала.

I. *Образуйте степени сравнения от следующих прилагательных и наречий.*

Big, many, heavy, wonderful, strong, comfortable, bad, angry, easy, good.

II. *Выберите правильный вариант из предложенных ниже.*

1. Our university is ...in this town. (large, larger, the largest)

2. Have you already heard the...news? (last, latest, late)

3. It's ...to make up a question than to give an answer (difficult, more difficult, the most difficult)

4. Our house is... than yours. (big, bigger, the biggest)

5. Max is the... football player. (good, better, the best)

6. Could you speak ..., please? ( loud, louder, the loudest)

III. *Переведите предложения на английский язык; обратите внимание на образование степеней сравнения прилагательных.*

1. Покажите мне ближайшую дорогу к школе.

2. Моя сестра - лучшая студентка в своей группе.

3. Дом моего соседа выше, чем мой дом.

4. «Гамлет» – одно из самых интересных произведений Шекспира.

5. Это задание намного сложнее, чем предыдущее.

## ВРЕМЕНА

### §8. Simple (Indefinite) Tenses (неопределенные времена)

#### **The Present Simple (Indefinite) Tense.**

#### **Настоящее простое (неопределенное) время**

Present Simple (Indefinite) употребляется для выражения обычного, регулярно повторяющегося действия в настоящем:

I **study** at college. Я учусь в колледже.

We **live** in Russia. Мы живем в России.

С Present Simple часто употребляются следующие наречия и словосочетания:

usually — обычно

always — всегда

never — никогда

often — часто

seldom — редко

sometimes — иногда

every day — каждый день

every week — каждую неделю

every month — каждый месяц

every year — каждый год

Как правило, наречия **usually, always, never, often, seldom** стоят перед смысловым глаголом:

**I usually** have breakfast at 7 o'clock. Я обычно завтракаю в 7 утра.

We **often** go to the cafe on Sundays. Мы часто ходим в кафе по воскресеньям.

He doesn't **always** have dinner at home. Он не всегда обедает дома.

I **never** eat ice cream in winter. Я никогда не ем мороженое зимой.

### **Образование вопросов в Present Simple**

*She goes to school every day.*

1. Does she go to school every day?

2. Who goes to school every day?

3. When does she go to school?

4. Does she go to school every day or twice a week?

5. She goes to school every day, does not she? - Yes, she does/

No, she doesn't.

### Задание на усвоение изученного грамматического материала.

*I. Раскройте скобки, употребляя глаголы в Present Simple.*

1. When you (to get) up every day? - I (to get) up at seven o'clock.

2. When she (to come) home after classes?

3. Our friends always (to go) to the country for the week-end.

4. My parents (not to watch) TV every evening.

5. My sister usually (to help) mother in the kitchen.

*II. Переведите предложения на английский язык, употребляя глаголы в Present Simple.*

1. Мы обычно занимаемся в университете шесть дней в неделю.

2. Как часто вы посещаете театр?

3. Время от времени мой брат приезжает к нам в гости.

4. Каждое лето мои друзья проводят на морском побережье.

5. Студенты сдают экзамены два раза в год.

6. Они не ходят в кино каждые выходные.

### **The Past Simple (Indefinite) Tense.**

#### **Прошедшее простое (неопределенное) время.**

The Past Simple (Indefinite) Tense выражает действия, которые произошли в прошлом.

We **came** home last week. Мы вернулись домой на прошлой неделе.

They **entered** the university a year ago. Они поступили в университет год назад.

С Past Simple часто употребляются следующие наречия и словосочетания:

yesterday – вчера	the day before yesterday - позавчера
last year – в прошлом году	last week – на прошлой неделе
a year ago – год назад	last month – в прошлом месяце
in 2009- в 2009 году	

### Образование Past Simple

Утвердительная форма правильных глаголов для всех лиц образуется путем прибавления суффикса **-ed** к основе глагола (т.е. так же, как образуется Past Participle).

Для образования Past Simple у неправильных глаголов используется 2-я форма из таблицы неправильных глаголов — (V<sub>2</sub> в таблице основных форм неправильных глаголов).

V, Infinitive	v <sub>2</sub> Past Simple	v <sub>3</sub> Past Participle	Перевод
to be	was, were	been	быть
to buy	bought	bought	покупать
to cut	cut	cut	резать
to do	did	done	делать
to drink	drank	drunk	иметь

Утвердительная форма	Отрицательная форма	Вопросительная форма
I went.	I did not/didn't go.	Did I go?
You went.	You did not/didn't go.	Did you go?
He went.	He did not/didn't go.	Did he go?
She went.	She did not/didn't go.	Did she go?
It went.	It did not/didn't go.	Did it go?
We went.	We did not/didn't go.	Did we go?
You went.	You did not/didn't go.	Did you go?
They went.	They did not/didn't go.	Did they go?

### Образование вопросов в Past Simple

*She went shopping last morning.*

1. Did she go shopping last morning?
2. Who went shopping last morning?
3. When did she go shopping last morning?

4. Did she go shopping last morning or last Monday?
5. She went shopping last morning, didn't she? — Yes, she did. / No, she didn't.

Задание на усвоение изученного грамматического материала.

*I. Раскройте скобки, употребляя глаголы в Past Simple.*

1. I (to read) this book last year.
2. You (to play) the piano yesterday?
3. When you (to see) Ann? - I (to see) her last week.
4. I (to meet) my friend two hours ago.
5. Yesterday they (to decide) to help their grandmother.

*II. Переведите предложения на английский язык, употребляя глаголы в Past Simple.*

1. Мои друзья вернулись из поездки неделю назад.
2. Вы были в кино позавчера?
3. Моя сестра не взяла книгу вчера в библиотеке.
4. Где вы купили новую квартиру? Мы купили квартиру недалеко от центра города.
5. Он поступил в университет в 2008 году.

### **The Future Simple (Indefinite) Tense (Будущее простое (неопределенное) время).**

Future Simple (Indefinite) выражает действия, которые произойдут в будущем:

He will begin this work tomorrow. Он начнет эту работу завтра.

С Future Simple часто употребляются следующие наречия и словосочетания:

tomorrow — завтра	the day after tomorrow — послезавтра
one of these days — на днях	next week — на следующей неделе
next year — на будущий год	next month — в следующем месяце
in a minute — через минуту	in no time - тотчас
in half an hour — через полчаса	

#### **Образование вопросов в Future Simple**

*They will go home at 12.*

1. Will they go home at 12?
2. Who will go home at 12?
3. When will they go home? Where will they go home?
4. Will they go home at 12 or at 1?
5. They will go home at 12, won't they? — Yes, they will. / No they won't.

Задание на усвоение изученного грамматического материала.

I. Раскройте скобки, употребляя глаголы в *Future Simple*

1. We (to go) to the cinema next week.
2. You (to help) your mother tomorrow?
3. They (not to take) care of the garden next summer.
4. You (to work) in the garden in an hour?
5. Children (not to go) to the zoo the day after tomorrow.

II. Переведите на английский язык в *Present, Past или Future Simple*.

1. Я люблю смотреть телевизор по вечерам.
2. Ты поедешь домой в следующем месяце?
3. Моя мама вчера не была на работе. Она была дома.
4. Моя сестра окончила университет в прошлом году.
5. Через неделю мои друзья вернутся из Москвы.
6. Мы обычно ходим в кино по субботам.

III. Переведите предложения на английский язык, употребляя глаголы в *Future Simple*.

1. В следующем году они переедут в деревню.
2. Мы встретимся с друзьями через час.
3. Когда вы сдадите экзамен по экономике?
4. Кто напишет реферат по истории России?
5. Эти студенты окончат университет в 2012 году.

## § 9. Participle I (Причастие настоящего времени)

### Образование **Participle I**

Participle I образуется прибавлением суффикса **-ing** к основе глагола и переводится на русский язык причастием настоящего или прошедшего времени:

cook — cooking — готовящий

Особенности орфографии при образовании Participle I:

- Если глагол в инфинитиве оканчивается на некое **e**, то при прибавлении окончания **-ing** **e** опускается:

to take — taking

- Если односложный глагол в инфинитиве оканчивается на одну согласную с предшествующим кратким гласным звуком, то при прибавлении окончания **-ing** конечная согласная удваивается:

to put — putting

- Если многосложный глагол оканчивается на одну согласную с



предшествующим кратким гласным звуком, то конечная согласная удваивается, если ударение падает на последний слог:

to begin — **beginning**, *но*: to open — opening

• Если глагол в инфинитиве оканчивается на у, то причастие образуется путем прибавления к инфинитиву окончания **-ing**:

to play — playing

### Функции Participle I в предложении

Функция	Пример	Перевод
определение (переводится причастием действительного залога)	The reading girl is my sister.	Читающая девочка – моя сестра.
обстоятельство (переводится деепричастием, может иметь предлоги <b>when</b> или <b>while</b> )	Going home I met my friend.	Идя домой, я встретил своего друга.
часть сказуемого во временах группы Continuous (переводится глаголом в личной форме)	They are playing in the yard now.	Они играют во дворе сейчас.

#### Задание на усвоение изученного грамматического материала.

I. Раскройте скобки, употребляя правильную форму глагола.

Переведите предложения на русский язык.

1. ....all the way, he followed Mr. Green upstairs (talk, talking, talked).

2. He...his problems with his wife just now (discuss, is discussing, discussing).

3. The trees...in our garden are very young (grow, grown, growing).

4. While ... our textbooks we learn much new and interesting facts (reading, read, is reading).

5. ... in our town my aunt visited twice. (being, be, was).

II. Переведите предложения на английский язык. Определите время и функцию Participle I.

1. Человек, стоящий на углу улицы - мой преподаватель по экономике.

2. Переходя дорогу, нужно обязательно посмотреть по сторонам.

3. Мы сейчас сдаем зачет по английскому языку.
4. Идя в университет, она встретила свою одногруппницу.
5. Посмотрите на играющих в парке детей!
6. Артистка, рассказывающая детям сказки по радио, знаменита на всю страну.
7. Моя бабушка, читающая мне эту сказку, живет в маленьком домике на берегу озера.
8. Играя в саду, дети не заметили, что стало темно.
9. Подойдя к двери, он открыл ее.
10. Лежа на диване, он читал книгу.

### §10. Progressive (Continuous) Tenses (Продолженные времена)

Группа продолженных времен употребляется для обозначения действия, происходящего в определенный момент времени в настоящем, прошедшем или будущем, которое представлено как процесс и образуется при помощи вспомогательного глагола **to be** в соответствующем времени и Participle I

(V-ing) смыслового глагола.

#### The Present Continuous Tense (Настоящее продолженное время)

Обозначает действие, происходящее в момент речи (**now, at the moment**).

Совпадает с другим действием или подчеркивает динамичность, а не статичность действия (как в Present Simple)

#### Образование Present Progressive (Continuous): am/is/are + V-ing

Утвердительная форма	Отрицательная форма	Вопросительная форма
I am doing my homework now.	I am not doing my homework now.	Am I doing my homework now?
We are walking in the park now.	We are not walking in the park now.	Are we walking in the park now?
You are watching TV now.	You are not watching TV now.	Are you watching TV now?
He is cooking dinner at the moment.	He is not cooking dinner at the moment.	Is he cooking dinner at the moment?
She is sleeping now.	She is not sleeping now.	Is she sleeping now?
It is mewing now.	It is not mewing now.	Is it mewing now?
		Are they working in

They are working in the garden now.	They are not working in the garden now.	the garden now?
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Задание на усвоение изученного грамматического материала.

I. Раскройте скобки, употребляя глаголы в *Present Progressive (Continuous)*.

1. The boys (to run) about in the garden now.
2. He (to do) his homework at this moment.
3. I (to go) to the library.
4. Alex (to sit) at her desk. He (to study) math.
5. The cat (to lie) on the floor.

II. Переведите предложения на английский язык, употребляя глаголы в *Present Progressive (Continuous)*.

1. Я сейчас читаю интересную книгу.
2. Он не пишет контрольную работу в данный момент.
3. Вы сейчас работаете?
4. Какой текст ты переводишь в данный момент?
5. Твоя подруга сейчас спит?

III. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Indefinite*.

1. They always (to read) many books.
2. The children (to eat) soup now.
3. You (to play) football well?
4. What Nick (to do) at this moment?
5. Look! Ann (to dance) at the class.

**The Past Progressive (Continuous) Tense (Прошедшее продолженное время)**

Обозначает действие, происходившее в определенный момент в прошлом:

at 5 o'clock yesterday; when something happened; the whole day.

**Образование Past Progressive (Continuous): was/were + V-ing**

Утвердительная форма	Отрицательная форма	Вопросительная форма
I was doing my homework at 7 o'clock	I was not doing my homework at 7 o'clock	Was I doing my homework at 7

yesterday. We were walking in the park from 7 to 8 in the evening. You were watching TV all the evening. He was washing up when I came home. She was cooking dinner when I came into the kitchen. My cat (it) was sleeping all day long. They were working in the garden from 10 till 11 in the morning.	yesterday. We were not walking in the park from 7 to 8 in the evening. You were not watching TV all the evening. He was not washing up when I came home. She was not cooking dinner when I came into the kitchen. It was not sleeping all day long. They were not working in the garden from 10 till 11 in the morning.	o'clock yesterday? Were we walking in the park from 7 to 8 in the evening? Were you watching TV all the evening? Was he washing up when I came home? Was she cooking dinner when I came into the kitchen? Was it sleeping all day long? Were they working in the garden from 10 till 11 in the morning?
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Задание на усвоение изученного грамматического материала.

I. Раскройте скобки, употребляя глаголы в *Past Progressive (Continuous)*.

1. While we (to cross) the road, I saw my friend.
2. They (to play) chess all the evening.
3. What you (to do) when we came home.
4. I (to cook dinner) while my brother (to watch) TV.
5. They (not to read) book all day long.

II. Переведите предложения на английский язык, употребляя глаголы в *Past Progressive (Continuous)* и *Past Simple*.

1. Какую книгу ты читал вчера весь вечер?
2. С кем ты разговаривал, когда я позвал тебя?
3. С 8 до 9 вечера мои друзья смотрели футбольный матч по телевизору.
4. Мой брат играл на компьютере, когда начался дождь.
5. Студентка переводила текст весь урок.

**The Future Progressive (Continuous) Tense (Будущее продолженное время)**

Обозначает действие, которое будет происходить в определенный момент в будущем:

at 5 o' clock tomorrow; when something happens

## **Образование Future Progressive (Continuous): will be + V-ing**

Задание на усвоение изученного грамматического материала.

*I. Раскройте скобки, употребляя глаголы в Future Progressive (Continuous).*

1. I (to do) my homework at six o'clock tomorrow.
2. He (to watch) TV the whole evening.
3. You (to play) volley-ball at this time tomorrow?
4. When you come to my place tomorrow, I (to read) a book.
5. He (to write) a composition the whole day next day.

*II. Переведите предложения на английский язык, употребляя глаголы в Future Progressive (Continuous) и Present Simple.*

1. Я буду смотреть интересный фильм, когда ты вернешься домой.
2. Завтра весь вечер мои друзья будут готовиться к зачету.
3. Студенты будут писать контрольную работу все занятие.
4. Когда он позвонит, мы будем играть в футбол.
5. Завтра в это же время мой брат будет сдавать экзамен.

## **§ 11. Конструкция to be going to do smth**

Конструкция to be **going** to употребляется для выражения запланированного действия, которое должно совершиться в ближайшем будущем:

I decided to enter this university. I'm going to do it.

Я решила поступить в этот университет. Я это сделаю.

I'm going to sell my house. Я собираюсь продать свой дом.

Helen is not going to have supper tonight. She is on a diet.

Елена не будет ужинать сегодня. Она на диете.

Задание на усвоение изученного грамматического материала.

*I. Переведите предложения на английский язык.*

1. Я собираюсь прочитать это произведение.
2. Мой друг решил купить новую машину.
3. Вы собираетесь построить новое здание театра?
4. Преподаватель не будет проводить сегодня занятие. Он заболел.
5. Кто собирается сдавать сегодня экзамен?

## **§ 12. Past Participle (Причастие прошедшего времени)**

Причастие II, или причастие прошедшего времени, является

причастием страдательного залога и соответствует русским формам на -нный, -мый, -тый (прочитанный, открытый).

Причастия прошедшего времени **правильных глаголов** образуются от инфинитива глагола путем прибавления к основе суффикса -ed:

open — opened.

Суффикс **-ed** произносится:

**[d]** — если основа глагола оканчивается на гласную или звонкую согласную:

play — played, live — lived

Причастия II неправильных глаголов являются 3-й формой глаголов и приводятся в 3-й колонке таблицы неправильных глаголов. В предложении причастие II выполняет следующие функции:

1) определения

● перед существительным: the written letter- написанное письмо

● после существительного в определительном причастном обороте:

The article written by our professor is very interesting.

Статья, написанная нашим профессором, очень интересная.

2) обстоятельства (причины и времени)

When written the article was sent to the journal.

Когда статью написали, ее отправили в журнал.

3) составной части сказуемого (при глаголе **to be** или **to**

**have**)

The text was translated yesterday. Текст был переведен вчера.

We have already translated this text. Мы уже перевели текст.

Задание на усвоение изученного грамматического материала.

*I. Место пропусков вставьте формы Participle II.*

1. The composition was...by the students. (to write)
2. When...she brought some books.(to ask)
3. We were drinking coffee...by her mother. (to make)
4. My parents live in the house... 10 years ago. (to build )
5. She told us about her winter holidays ...in London. (to spend)
6. The research work...by the young scientist is very useful. (to carry out)
7. The experiment...by the students took up much time. (to do)

## II. Переведите следующие словосочетания:

Доклад, написанный (to write) моим братом; перевод, сделанный (to do) студентами нашей группы; эксперимент, проделанный (to make) молодым ученым; выполненная (to carry out) научная работа; экзамен, сданный (to pass) успешно; статья, опубликованная (to publish) в научном журнале; решенная (to solve) проблема; подарок, полученный (to get) в день рождения; нарисованный (to draw) плакат; конференция, проведенная (to spend) в нашем университете.

## III. Выберите из скобок подходящую форму причастия.

1. The sentences (writing, written) on the blackboard are rather difficult.
2. Everything (hearing, heard) here is quite right.
3. The exercises (doing, done) by the students were easy.
4. The article (writing, written) by this scientist is very interesting.
5. The (losing, lost) magazine was found in the desk.
6. Find the article (publishing, published) in the last magazine.
7. The letter (receiving, received) yesterday is on the table.
8. The main building of our University (surrounding, surrounded) by old trees is very beautiful.

## § 13. Perfect Tenses (Совершенные времена)

### The Present Perfect Tense (Настоящее совершенное время)

Обозначает действие, совершившееся в прошлом, но имеющее тесную связь с настоящим в виде результата.

При употреблении **Present Perfect Tense** говорящего интересует не время совершения действия, а тот факт, что действие произошло.

— Have you washed the dishes yet? — Ты уже помыла посуду?

— Yes, I have already washed the dishes. — Да, я уже помыла посуду.

С **Present Perfect** часто употребляются следующие наречия и словосочетания:

today — сегодня

this year — в этом году

ever — когда-нибудь

just — только что

already — уже

this week — на этой неделе

tonight — сегодня вечером

never — никогда

lately, recently — недавно

yet — еще (не), уже

### Образование Present Perfect: to have + V<sub>3</sub>

Утвердительная форма	Отрицательная форма	Вопросительная форма
I have bought.	I have not bought.	Have I bought?
You have bought.	You have not bought.	Have you bought?
He has bought.	He has not bought.	Has he bought?
She has bought.	She has not bought.	Has she bought?
It has eaten.	It has not eaten.	Has it eaten?
We have bought.	We have not bought.	Have we bought?
You have bought.	You have not bought.	Have you bought?
They have bought	They have not bought.	Have they bought?

### Образование вопросов в Present Perfect

*I have never been in London .*

1. Who has never been in London?
2. Have you ever been in London?
3. Where have you never been?
4. Have you ever been in London or in Washington?
5. You have never been in London, have you?

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Задание на усвоение изученного грамматического материала.

*I. Переведите на английский язык, употребляя глаголы в Present Perfect или Present Continuous.*

1. Я только что позавтракал.
2. Мы сейчас пьем чай в столовой.
3. Моя сестра еще не прочитала эту книгу
4. Кто сейчас играет на пианино в соседней комнате?
5. Я никогда не встречала этого человека.
6. Он разговаривает со своим другом в данный момент.

*II. Переведите на английский язык, употребляя глаголы в Present Perfect или Past Simple.*

1. Мы вернулись из командировки на прошлой неделе.
2. Они только что вернулись из театра.
3. Когда вы ездили в Москву?- Мы ездили в Москву месяц назад.
4. Моя сестра никогда не была в Англии.
5. Ты уже написал статью? Да, я написал ее вчера вечером.



*III. Раскройте скобки, употребляя глаголы в Present Perfect или Past Simple*

1. We (to travel) around Europe last year.
2. I just (to meet) our teacher.
3. Yesterday they (to decide) to help their grandmother.
4. The rain (to stop) and the sun is shining in the sky again.
5. The rain (to stop) half an hour ago.

**The Past Perfect Tense (Прошедшее совершенное время)**

Обозначает действие, которое завершилось к определенному моменту времени в прошлом. Этот момент времени может обозначаться:

1. Обстоятельством с предлогом **by**

**by 5 o'clock** - к 5 часам

I had translated the text by the evening yesterday.

Я перевел текст вчера к вечеру.

2. Другим действием в прошлом.

I had already printed the letter when you came home.

Я уже напечатал письмо, когда вы пришли домой.

**Образование Past Perfect: had + V<sub>3</sub>**

+ Mary had laid the table before her mother came home.

— Mary had not laid the table before her mother came home.

? Had Mary laid the table before her mother came home?

Задание на усвоение изученного грамматического материала.

*I. Раскройте скобки, употребляя глаголы в Past Simple, Past Progressive (Continuous) и Past Perfect. Переведите предложения на русский язык.*

1. The telegram (to come) some minutes after he (to leave).
2. We (to enter) the stadium just as the football players (to come) out on to the field.
3. When I (to call) at his house, they (to tell) me that he (to leave) an hour before.
4. He wanted to visit the place where he (to live) in his childhood.
5. She (to look) very tired as she (to work) hard for two hours.
6. He (to wait) for me as he (to lose) his key and could not get into the room.

*II. Переведите на английский язык, употребляя глаголы в Past Simple, Past Progressive (Continuous) и Past Perfect.*

1. Я закончил перевод текста вчера к вечеру.
2. Вчера в это время мы с друзьями играли в волейбол.
3. Когда они окончили университет? Они окончили университет в прошлом году.
4. Когда ты пришел в школу, все ученики уже написали контрольную работу.
5. Экзамен по русскому языку закончился к пяти часам вечера.

### **The Future Perfect Tense (Будущее совершенное время)**

Обозначает действие, которое завершится к определенному моменту времени в будущем. Этот момент времени может обозначаться:

- обстоятельством с предлогом **by**

**by the evening** - к вечеру

I will have translated the text by the evening tomorrow.

Я переведу текст завтра к вечеру.

- другим действием в будущем.

I will have already printed the letter when you return home.

Я уже напечатаю письмо, когда вы вернетесь домой.

### **Образование Future Perfect: shall/will + have + V**

+ He will/he'll have finished the work by 2 o'clock.

— He will not have finished the work by 2 o'clock.

? Will he have finished the work by 2 o'clock?

Задание на усвоение изученного грамматического материала.

*I. Переведите на английский язык, употребляя глаголы в Future Simple, Future Progressive (Continuous) и Future Perfect.*

1. Завтра к этому времени мы уже закончим переговоры.
2. В это время завтра студенты будут писать реферат по истории.
3. Вы хотите посетить музей Мадам Тюссо в Англии?
4. Когда вы вернетесь из кинотеатра, мы будем играть в шахматы.
5. К твоему приходу я переведу этот сложный текст.

*II. Раскройте скобки, употребляя глаголы в одном из следующих времен:*

*Present, Past, Future Simple; Present, Past Progressive (Continuous); Present, Past Perfect.*

1. Yesterday Ann (to say) that she (to read) much during her summer vacation.

2. At the age of twenty my friend (to combine) work and study.
3. A great number of students (to study) in the reading-room when I (to enter) it last night.
4. When I (to enter) the hall, the students (to listen) to a very interesting lecture in history.
5. He (to come) home at five o'clock yesterday.
6. I (to ring) you up as soon as I (to come) home I tomorrow.
7. I (to show) you my work if you (to like).
8. Our students (to do) all kinds of exercises and now they (to be) sure that they (to know) this rule well.
9. They (to hope) they (to make) no mistakes in the test-paper.
10. My brother (to eat) ice-cream every day. Look, he (to eat) ice-cream now.
11. When I (to see) him in the morning, he (to eat) ice-cream, too.

**Сводная таблица времен английского языка в активном залоге**

	Simple. Неопределённое время (повторяющиеся действия; факты, истины)	Progressive. Продолженное время (действия, происходящие в данный момент или период времени; запланированное действие в ближайшем будущем)	Perfect. Завершённое время (действие, завершившееся к определённому моменту времени в настоящем, прошедшем или будущем)
Present	I <i>ask</i> He <i>asks</i> She <i>asks</i> It <i>asks</i> We <i>ask</i> You <i>ask</i> They <i>ask</i> <b>Always, as a rule, every day, usually, sometimes, often,</b>	I <i>am</i> <i>asking</i> He <i>is</i> She <i>is</i> It <i>is</i> We <i>are</i> You <i>are</i> They <i>are</i> <b>Right now, at the moment.</b>	I <i>have</i> <i>asked</i> He <i>has</i> She <i>has</i> It <i>has</i> We <i>have</i> You <i>have</i> They <i>have</i> <b>Already, ever, never, just.</b>

	<b>seldom.</b>		
Past	I <i>asked</i> He She It We You They <b>Last week (year, month), yesterday, in 2005, ago.</b>	I <i>was asking</i> He <i>was</i> She <i>was</i> It <i>was</i> We <i>were</i> You <i>were</i> They <i>were</i> <b>At that moment, when..., while...</b>	I <i>had asked</i> He She It We You They <b>By that moment yesterday.</b>
Future	I <i>will ask</i> He She It We You They <b>Tomorrow, next week (year, month), soon, in a few days.</b>	I <i>will be asking</i> He She It We You They <b>At this time tomorrow, when..., while...</b>	I <i>will have asked</i> He She It We You They <b>By that moment tomorrow.</b>

#### §14 . Модальные глаголы

Модальные глаголы не выражают действия, а лишь указывают на отношение говорящего к действию, которое выражено следующим за ним глаголом, употребляющимся, как правило, без частицы *to*.

Вопросительная и отрицательная формы модальных глаголов образуются без вспомогательного глагола.

#### Can

Глагол **can** выражает физическую возможность, умение, способность:

This student can speak English well. Этот студент может хорошо говорить по-английски.

This woman cannot/can't speak English well. Эта женщина не может хорошо говорить по-английски.

Can this woman speak English well? Может ли эта женщина хорошо говорить по-английски?

В современном разговорном языке **can** употребляется также в

вопросительных предложениях, выражающих предложение помощи или просьбу:

Can I help you? Могу я вам помочь?

Can I use your phone? Можно я воспользуюсь вашим телефоном?

У глагола *can* есть форма прошедшего времени *could*.

### May

Глагол **may** выражает разрешение:

May I come in? — Можно войти? Yes, you may.-Да.

May I take your dictionary? — Можно взять твой словарь?

You certainly may - Конечно можно. / You can't take it - Нельзя.

(Ты не можешь взять его.)

У глагола *may* есть форма прошедшего времени *might*.

### Must

Глагол **must** выражает необходимость, обязанность:

You must work much. Вы должны много работать.

Отрицательная форма **must not/mustn't** выражает категорическое запрещение:

You mustn't open the window. Вам нельзя открывать окно.

I must help him. Я должен помочь ему.

Must I help him? — Должен ли я помочь ему? —

Yes, you must. Да, должен.

No, you needn't. Нет, не обязательно.

No, you must not/mustn't. Нет (*запрещение*).

### Need

Модальный глагол **need** употребляется только в отрицательной форме и имеет значение отсутствия необходимости что-либо делать:

I needn't go to the library today - Мне не нужно идти сегодня в библиотеку.

I have all text-books - У меня есть все учебники.

You needn't hurry - Не нужно торопиться.

Смысловой глагол **need** имеет значение *нуждаться*:

She needs this article. Ей нужна эта статья.

She doesn't need this article. Ей не нужна эта статья.

Does she need this article? Ей нужна эта статья?

What does she need? Что ей нужно?

### Should, ought to

Глаголы **should, ought to** выражают совет и переводятся словами *следует (не следует), нужно (не нужно)*:



### Эквиваленты модальных глаголов.

Модальные глаголы не имеют форм во всех временах, для этого употребляются их эквиваленты (заменители). Эквивалентами (заменителями) модальных глаголов являются следующие сочетания:

**Must = 1) to have to... 2) to be to...**

**Can = to be able to...**

**May = to be allowed to...**

Вопросительная и отрицательная формы сочетания **to have** образуются при помощи вспомогательного глагола в соответствующем времени:

**Do you have to go there? Did you have to go there?**

Для сочетаний с глаголом **to be** вопросительная и отрицательная формы образуются по правилу для глагола **to be**.

**Were you allowed to take this magazine?**

He **wasn't allowed** to visit you.

**Will you be allowed** to go to the cinema?

Задание на усвоение изученного грамматического материала.

*I. Замените модальные глаголы соответствующими эквивалентами.*

1. You must visit your grandparents. 2. They can play football. 3. He may go home.

4. She couldn't swim. 5. They might work in the garden. 6. You should be more attentive. 7. May I go out? 8. Who can answer the question? 9. He should stay at home. 10. Nobody could translate this sentence.

*II. Употребите сказуемое в прошедшем и будущем времени.*

1. You must learn all the new words. 2. He should take the medicine. 3. I can't go with you, I am very busy. 4. You may take off your coat. 5. I can see nothing, it is too dark. 6. You should have a rest. 7. She must work hard at her English. 8. They may choose one of the books.

*III. Заполните пропуски эквивалентами модальных глаголов.*

1. He...wait her for a long time yesterday. 2. I... ring him up yesterday, but I was busy. 3. You... go to the stadium tomorrow. 4. You ... work a lot in summer. 5. He.... read the text twice before he understood it. 6. You ... to go home when you'll finish your work. 7. You look so tired. You...to have a good rest.

*IV. Переведите, употребляя эквиваленты модальных глаголов.*

1. Ты сможешь сделать эту работу завтра. 2. Тебе разрешат заниматься спортом, когда ты будешь лучше себя чувствовать. 3. Я

думаю, она не сумеет решить эту задачу.4. Ты должна была отослать это письмо вчера. 5.Завтра я буду свободен и смогу тебе помочь.6. Ты не должен был забывать о своих обязанностях. 7. Я должен буду повидать моего друга

## § 15. Passive Voice (Пассивный (страдательный) залог) группы времён Simple

В английском языке, как и в русском, существует два залога.

• **Активный (действительный)** залог характеризуется тем, что лицо или предмет, выраженные подлежащим, сами совершают действие.

• **Пассивный (страдательный)** залог показывает, что лицо или предмет, выраженные подлежащим, подвергаются действию со стороны другого лица или предмета.

**to be + V<sub>3</sub>**

Глаголы в Passive Voice переводят на русский язык глаголами в страдательном залоге, возвратными глаголами или неопределенно-личным предложением

Trees usually are planted in spring. Деревья обычно сажают весной.

He was invited to the party. Он был приглашен на вечеринку

I was given a lot of flowers for my birthday. Мне подарили много цветов на день рождения.

This work will be done soon. Эта работа будет скоро сделана.

В английском языке Passive Voice употребляется гораздо чаще, чем в русском. Предложения с непереходными глаголами могут представлять определенные затруднения при переводе на русский язык:

I was asked to answer the letter. Меня попросили ответить на письмо.

He is always helped with homework in English.

Ему всегда помогают делать домашнее задание по английскому языку.

She will be given a fine present. Она получит прекрасный подарок.

Непереходные глаголы могут употребляться с предлогами:

The story was much spoken about. Об этой истории много говорили.

The doctor was sent for.

За врачом послали.



He will not be waited for.

Его не будут ждать.

После глаголов в Passive Voice часто следует дополнение со следующими предлогами:

**by** (указывает на лицо, совершающее действия): The translation was made **by** our teacher. Перевод был сделан нашим учителем.

**with** (указывает на орудие действия): This poster is drawn **with pencils**. Этот плакат нарисован карандашами.

**of** (указывает на материал, из которого сделан предмет): The table is made **of** good sorts of timber. Стол сделан из хороших сортов древесины.

**from** (указывает на состав):

This bread is baked **from** wheat flour. Этот хлеб приготовлен из пшеничной муки.

После модальных глаголов употребляется Passive Infinitive:

The report **must be written** by Monday. Доклад должен быть написан к понедельнику.

The field **can be plowed** in the fall. Поле может быть вспахано осенью.

The corn **should be fertilized**. Кукурузу следует удобрить.

Задание на усвоение изученного грамматического материала.

1. *Раскройте скобки, употребляя глаголы в страдательном залоге.*

1. Many experiments (to make) at our laboratory every day. 2. The composition (to write) yesterday. 3. The field (to sow) in spring. 4. Mushrooms (to gather) in autumn. 5. The watermelon (to eat) yesterday. 6. This grape (to grow) next spring by my grandfather. 7. The task (to perform) by him yesterday. 8. The crops (to harvest) in summer.

*II. Переведите, употребляя страдательный залог.*

1. Эти книги используются для написания доклада. 2. Эти яблони были посажены прошлой осенью. 3. Нас пригласят на научную конференцию в Лондон. 4. Этого ученого часто вспоминают. 5. Доклад был сделан молодым ученым. 6. Эта статья уже переведена на несколько языков. 7. Студентам дали время на подготовку к экзамену. 8. Его научная работа будет закончена к осени.

*III. Передайте следующие предложения в Passive Voice. Определите время.*

1. We asked him about his conference. 2. He introduced me to his relatives. 3. She told us everything. 3. Somebody opened the window. 4. Bees gather honey from flowers. 5. The doctor will prescribe my mother

new medicine. 6. Children like to drink milk. 7. Students planted many trees in autumn. 8. They often speak about her. 9. He passed his exams with good marks. 10. Students carried out many experiments.

## § 16. The Infinitive (Инфинитив)

Инфинитив — неопределенная форма глагола, отвечает на вопрос *что делать!* {*что сделать!*}).

### Функции инфинитива в предложении

Функции	Способы перевода на русский язык
<p>1. <i>Подлежащее</i></p> <p><b>To translate</b> the text is our homework.</p>	<p><i>Существительным</i></p> <p><b>Перевод</b> текста — наше домашнее задание.</p> <p><i>Инфинитивом</i></p> <p><b>Переводить</b> текст — наше домашнее задание</p>
<p>2. <i>Часть составного глагольного сказуемого</i></p> <p>You must <b>help</b> your mother about the house.</p>	<p><i>Инфинитивом</i></p> <p>Вы должны <b>помогать</b> вашей матери по дому.</p>
<p>3. <i>Именная часть сказуемого после подлежащего, выраженного словами aim (цель), duty (долг), task (задача) и т. п.</i></p> <p>Our task is <b>to fulfil</b> our work in time.</p>	<p><i>Инфинитивом</i></p> <p>Наша задача — <b>выполнить</b> работу в срок.</p> <p><i>Придаточным предложением.</i></p> <p>Наша задача заключается в том, <b>чтобы выполнить работу в срок.</b></p>

<p>4. Дополнение</p> <p>We hope <b>to get</b> a good mark.</p>	<p><i>Инфинитивом</i></p> <p>Мы надеемся <b>получить</b> хорошую оценку.</p>
<p>5. <i>Обстоятельство цели</i> (может вводиться союзом <b>in order to</b> — <i>для того чтобы</i>)</p> <p><b>To speak</b> English well you have to work hard.</p> <p>A lot of machines were developed in order <b>to make</b> easier the work of the farmer.</p>	<p><i>Инфинитивом с союзами <b>чтобы, для того чтобы.</b></i></p> <p><b>Чтобы</b> хорошо <b>говорить</b> по-английски, вы должны много заниматься.</p> <p><i>Существительным с предлогом <b>для</b></i></p> <p>Разработано много техники <b>для облегчения</b> труда фермера.</p>
<p>6. Определение</p> <p>A thermometer is an instrument <b>to show</b> the temperature.</p> <p>The tests <b>to be solved</b> are very difficult.</p>	<p><i>Сказуемым определительного придаточного предложения.</i></p> <p>Термометр — это прибор, <b>который показывает</b> температуру.</p> <p><i>Причастием</i></p> <p>Термометр — это прибор, <b>показывающий</b> температуру.</p> <p><i>Определительным придаточным предложением, сказуемое которого выражает долженствование, возможность</i></p> <p>Задачи, <b>которые будут (могут, должны) решаться</b> — очень трудные.</p>

Задание на усвоение изученного грамматического  
материала

*I. Вместо пропусков вставьте подходящие формы:*

1... this problem you should read this article .

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a) to discuss      b) discussing

1. I prefer...English.

a) speaking      b) to speak

3. He wants... this city.

a) leaving b) to leave

4. She is too busy...with you.

a) to talk      b) talking

5... this article, you must go to the reading-room.

a) to find      b) finding

6. It is the sportsman...in the competition.

a) taking part      b) to take part

*II.Переведите:*

1.Она рада, что присутствовала на лекции. 2. Чтобы решить эту проблему потребуется много времени. 3.На нее приятно смотреть. 4.Я хотел поговорить с тобой.5. Кажется, он много читает. 6.Чтобы получить хорошую оценку, вы должны много работать. 7.Я готовлю доклад, чтобы выступить с ним на конференции.8. Цель нашего эксперимента - получить новые результаты.

## §17. Gerund (Герундий)

Герундий — неличная форма глагола, сочетающая свойства глагола и существительного. В русском языке такая форма отсутствует.

Образуется при помощи суффикса **-ing** от инфинитива глагола.

### Функции герундия в предложении

Функции	Способы перевода на русский язык
1. Подлежащее. <b>Smoking</b> is harmful.	<i>Существительным.</i> <b>Курение</b> вредно. <i>Инфинитивом.</i> <b>Курить</b> вредно.
2. Прямое дополнение. I like <b>reading</b> .	<i>Существительным.</i> Я люблю <b>чтение</b> . <i>Инфинитивом.</i> Я люблю <b>читать</b> .
2. Часть сложного сказуемого He stopped <b>smoking</b> .	<i>Существительным.</i> Он прекратил <b>курение</b> . <i>Инфинитивом.</i> Он прекратил <b>курить</b> .
4. Обстоятельство <b>On coming</b> home he decided to have a rest. <b>After finishing</b> the work they went home on foot. She left <b>without saying a word</b> .	<i>Деепричастным оборотом</i> <b>Придя домой</b> , он решил отдохнуть. <b>Закончив работу</b> , они пошли домой пешком. Она ушла, <b>не сказав ни слова</b> .
5. Определение I don't like his manner <b>of joking</b> .	<i>Существительным, инфинитивом.</i> Мне не нравится его манера <b>шутить</b> .
6. Предложное дополнение I knew of his <b>studying</b> at the University.	<i>Существительным</i> Я знал о его <b>учебе</b> в университете. <i>Придаточным предложением</i> Я знал, <b>что он учится в университете</b> .

### Глаголы, требующие употребления герундия

to avoid — избегать	to deny — отрицать
to enjoy — наслаждаться	to excuse — извинять
to finish — заканчивать	to give up — прекращать, бросать
to go on — продолжать	to hate — ненавидеть

to like — нравиться

to mind — возражать

to need — нуждаться

to start — начинать

to stop — прекращать

to suggest — предлагать и др.

### Глаголы и выражения, требующие употребления герундия с определенными предлогами

to agree to — соглашаться (с чем-л.)

to be afraid of — бояться (чего-л.)

to be good at — быть способным (к чему-л.)

to be good for — быть хорошим/подходящим (для чего-л.)

to depend on — зависеть (от чего-л.)

to give up the idea of — оставить мысль (о чем-л.)

to insist on — настаивать (на чем-л.)

to look forward to — ожидать (чего-л.) с удовольствием, нетерпением

to prevent from — препятствовать (чему-л.)

to succeed in — преуспевать (в чем-л.)

to thank for — благодарить (за что-л.)

instead of — вместо (чего-л.)

После глаголов **to begin, to start, to continue** может употребляться как герундий, так и инфинитив:

He began **to translate/translating** the text yesterday.

Он начал переводить текст вчера.

He continued **to work/working** till 10 o'clock.

Он продолжал работать до 10 часов.

После глагола **need** употребляется инфинитив, если выражается необходимость кому-либо сделать что-либо:

She needs **to work** harder. Ей нужно больше работать.

После глагола **need** в пассивном значении употребляется герундий:

The carpet is dirty. Ковер грязный.

It needs **washing**. Его нужно **чистить**.

### Задание на усвоение изученного грамматического материала.

*I. Вместо пропусков вставьте подходящие формы глаголов.*

1. We go on...English. (to study, studying) 2. You shouldn't avoid... these facts. (to mention, mentioning) 3. They insisted on ...Russian only. (speaking, to speak) 4. They go on... this problem.(to discuss, discussing)

5. He has a wish of... a book. (to write, writing) 6. After... TV she went for a walk. (watching, to watch) 7. Before... the door, she opened the window. (to close, closing) 8. He insisted on our (leaving, to leave)

*II. Раскройте скобки, используя герундий, переведите предложения.*

1. (To learn) foreign languages is very useful. 2. Your room needs (to clean). 3. (To read) a good book gives me a lot of pleasure. 4. They are fond of (to dance).

5. Instead of (to work) in the garden he went to the cinema. 6. Do you mind my (help) you? 7. After (to play) football in the yard he went home. 8. They started (to carry out) the experiment.

### § 18. The Complex Object (Сложное дополнение)

Сложное дополнение — это синтаксический комплекс, состоящий из именной части (существительного или местоимения) и глагольной части (инфинитива, герундия или причастия).

Сложное дополнение может состоять из прямого дополнения и инфинитива:

• с частицей **to** после глаголов **to want, to believe, to expect, to find, would like** и др.:

I want you to tell the truth. Я хочу, чтобы ты говорил правду.

I believe him to be a good sportsman. Я считаю, что он хороший спортсмен.

I expect them to arrive in time. Я надеюсь, что они приедут вовремя.

I find your experiment to be very successful .

Я нахожу, что твой эксперимент очень успешен.

I would like them to go to the country. Я бы хотела, чтобы они поехали за город.

• без частицы **to** после глаголов **to let, to make**:

Mother does not let them go for a walk late at night.

Мама не разрешает им смотреть телевизор после 10 часов.

Mother made us help her in the garden. Мама заставила нас помочь ей в саду.

• с инфинитивом без частицы **to** или с Participle I после глаголов восприятия **to see, to hear, to watch, to notice, to feel** и т.д.

We heard her playing the piano. Мы слышали, как она играла на

пианино.

Сравните значения при переводе:

Инфинитив — однократное действие	Participle I — процесс
I saw her <b>come</b> into the house. Я видел, что она вошла в дом.	I saw her <b>coming</b> into the house. Я видел, как она входила в дом.
I didn't hear him <b>play</b> the piano. Я не слышал, чтобы он играл на фортепьяно.	I didn't hear him <b>playing</b> the piano. Я не слышал, как он играл на фортепьяно.
She felt somebody <b>touch</b> her hand. Она почувствовала, что кто-то прикоснулся к ее руке.	She felt everybody <b>touching</b> her hand. Она чувствовала, как все прикасаются к ее руке.

Задание на усвоение изученного грамматического материала.

*I. Раскройте скобки.*

1. She made us (to wait) her for half an hour. 2. The teacher advised us (to use) dictionary. 3. I didn't hear you (to come) into the room. 4. I find your translation (to be) very good. 5. We expect them (to come) in time. 6. I want my son (to learn) English. 7. We expected her (to behave) quite differently. 8. I saw the little girls (to play) in the garden. 9. Nobody noticed him (to go out) of the room. 10. We don't want you (to tell) anything.

*II. Переведите на английский язык.*

1. Мы ожидаем, что они хорошо проведут у нас время. 2. Я хочу, чтобы ты прочел эту статью. 3. Я не хочу, чтобы мы опоздали. 4. Он рассчитывал, что учитель его похвалит. 5. Я знаю, что твоя сестра очень хорошая студентка. 6. Наш учитель любит, когда мы задаем вопросы. 7. Дождь заставил нас вернуться домой. 8. Я слышала, как он играет на пианино. 9. Мать видела, что ее дети делают домашнее задание. 10. Я хочу, чтобы эту статью напечатали в журнал.

## §16. The Complex Subject (сложное подлежащее)

Инфинитивная конструкция «Сложное подлежащее» состоит из личного местоимения в именительном падеже или существительного в общем падеже и инфинитива, которые вместе образуют сложное подлежащее:

He is expected to come back from London today.

Ожидают, что он вернется из Лондона сегодня.

Данная конструкция употребляется, когда сказуемое выражено:

1. Глаголами **to know, to believe, to consider, to expect, to**



**think , to suppose, to say** и др. в форме Passive Voice:

He is said to study at the university. Говорят, что он учится в университете.

**2.** Глаголами **to seem, to appear, to happen, to prove** и др. в форме Active Voice:

They seem to know her very well. Кажется, что они знают ее очень хорошо.

**3.** Глаголами **to be** в сочетании с прилагательными **likely, unlikely, certain, sure**:

He is sure to come in time. Он обязательно придет во время.

Задание на усвоение изученного грамматического материала

*I. Подберите правильный перевод предложений:*

1. Кажется, он купил компьютер.

a) He seems to have bought a computer.

b) He is supposed to have bought a computer.

c) He proves to have bought a computer.

**2.** Они обязательно помогают своим друзьям.

a) They are likely to help their friends.

b) They are sure to help their friends.

c) They are unlikely to help their friends.

**3.** Несомненно, он сделает доклад.

a) He is certain to make a report.

b) He is likely to make a report.

c) He seems to make a report.

**4.** Известно, что этот метод дал хорошие результаты.

a) This method seems to have given good results.

b) This method is said to have given good results.

c) This method is known to have given good results.

**5.** Сообщили, что они придут вечером.

a) They were sure to arrive in the evening.

b) They were reported to arrive in the evening.

c) They are said to arrive in the evening.

*II. Подберите правильный перевод предложений:*

1. These students are known to have passed all the exams successfully.

a) Очевидно, что эти студенты сдали все экзамены успешно.

b) Известно, что эти студенты сдали все экзамены успешно.

c) Говорят, что эти студенты сдали все экзамены успешно.

1. They seem to have learned all the words.

- а) Кажется, они учат все слова.  
 в) Кажется, что они выучат все слова.  
 с) Кажется, что они выучили все слова.
2. He is said to have given up smoking.  
 а) Говорят, что он бросил курить.  
 в) Думают, что он бросил курить.  
 с) Кажется, он бросил курить
3. The experiment proved to be successful.  
 а) Эксперимент оказался удачным.  
 в) Эксперимент кажется удачным.  
 с) Эксперимент, казалось бы, удачен.
4. He is known to be a good sportsman.  
 а) Он известный спортсмен.  
 в) Он известен как спортсмен.  
 с) Известно, что он хороший спортсмен.

*III. Переведите следующие предложения:*

1. Он вряд ли поступит в университет. 2. Оказывается, они переводят текст. 3. Говорят, что они участвуют в соревнованиях. 4. Маловероятно, что она напишет статью в срок. 5. Говорят, что он прекрасно знает английский. 6. Оказалось, что он знает несколько иностранных языков. 7. Полагаем, он примет участие в конференции. 8. Сообщили, что они придут вечером.

**§ 17. Согласование времен. Косвенная речь.**

● *Правила согласования времен вступают в силу, только если слова автора употреблены в прошедшем времени.*

Характер действия в придаточном предложении	Прямая речь	Косвенная речь
1. Одновременное действие	<i>Present Simple/ Progressive</i> → She said, "I like summer." He said, "Ann is reading a book now." He said, "I can do it myself."	<i>Past Simple/ Progressive</i> She said (that) she liked summer. He said (that) Ann was reading a book then. He said (that) he could do it himself.
2.	<i>Present</i>	<i>Past Perfect/Perfect</i>

Предшествующее действие	<i>Perfect/Perfect Progressive</i> → <i>Past Simple/ Progressive</i> →  She said, "I have bought a new dress." She said, 'I've been living here for two years." He said, "I sent her a present." She said, "He has been translating my document all day."	<i>Progressive Past Perfect/Perfect Progressive</i>  She said (that) she had bought a new dress." She said she had been living there for two years." He said he had sent her a present." She said he had been translating her document all day."
3. Последующее действие	<i>Future Simple / Progressive</i> → He said, "I shall see my friend tomorrow." He said, "I will be passing an examination on Tuesday"	<i>Future-in-the-Past</i> He said he would see his friend the next day. He said he would be passing an examination on Tuesday.

***Правила перевода предложений из прямой речи в косвенную.***

1. При переводе ***утвердительных предложений*** из прямой речи в косвенную изменяется время во второй части (см. таблицу). Между главной и придаточной частью может ставиться союз «that». Изменяется подлежащее в придаточной части, выраженное местоимением.

Peter said: "I ***am*** a student" - Peter said (that) ***he was*** a student.

2. При переводе ***предложений в повелительном наклонении*** из прямой речи в косвенную перед второй частью ставится частица «to». Если предложение с прямой речью содержит отрицание, то при переводе в косвенную речь перед придаточной частью ставится отрицательная частица «not»+ частица «to».

The teacher asked: "Close the door, please." - The teacher asked ***to*** close the door.

The officer ordered the soldiers: "Don't talk" - The officer ordered the soldiers ***not to*** talk.

3. При переводе *общего вопроса* из прямой речи в косвенную происходят следующие изменения:

- изменяется время во второй части (см.таблицу);
- в придаточной части используется прямой порядок слов (как в утвердительном предложении);
- изменяется подлежащее в придаточной части, выраженное местоимением; ● между главной и придаточной частью ставится союз «if» или «whether».

He asked: “**Are you busy now?**” - He asked if (whether) *I was busy then*.

The teacher asked the students: “**Have you prepared** for the lesson?” - The teacher asked the students if (whether) *they had prepared* for the lesson.

3. При переводе *специального вопроса* из прямой речи в косвенную происходят следующие изменения:

- изменяется время во второй части (см.таблицу);
- в придаточной части используется прямой порядок слов (как в утвердительном предложении);
- изменяется подлежащее в придаточной части, выраженное местоимением; ● между главной и придаточной частью ставится специальное вопросительное слово, с которого начинался специальный вопрос в прямой речи.

My friend asked: “Where **do you live**?” - My friend asked where *I lived*.

They asked: “Why **did you miss this** meeting?” - They asked why *we missed that* meeting.

*При переходе из прямой речи в косвенную указательные местоимения и наречия времени и места изменяются следующим образом:*

this - that

these - those

today - that day

this morning (week, month, summer) - that morning (week, month, summer)

now - then

here - there

tomorrow - the next (the following) day

next week (month, year) - the next week (month, year)

ago - before

some days (weeks, months, hours) - some days (weeks, months, hours) before

yesterday - the day before, the previous day

last week (month, Sunday, etc.) - the previous week (month, Sunday, etc.) or the week (month, year, etc.) before.

Задание на усвоение изученного грамматического материала.

*I. Употребите глагол в скобках в правильном времени, используя правила согласования времен. Если нужно, измените наречия места и времени.*

1. I told you that Mr. Ivanov (to return) yesterday.
2. He said that he (to buy) this magazine tomorrow.
3. She said that she (to read) the book for two hours.
4. My friend said that he (to spend) his summer vacation well.
5. He said that he (can) run very fast.

*II. Переведите предложения на английский язык, используя правила согласования времен.*

1. Она сказала, что писала это реферат три часа.
2. Он сказал, что приедет домой через неделю.
3. Наш преподаватель объявил, что уже проверил наши диктанты.
4. Моя подруга рассказала, что переводила текст целый вечер вчера.
5. Он утверждал, что сдаст экзамен по экономике вовремя.

*III. Переведите предложения из прямой речи в косвенную, используя правила согласования времен*

1. He said: "I passed my final exam yesterday."
2. She promised: "I shall phone you tomorrow."
3. My best friend said: "I am going to England next year."
4. He said: "I have lost my book."
5. His mother said: "I'm very busy today."
  
6. He ordered: "Don't watch TV any more".
7. She asked: "What do you want for supper?"
8. The student asked: "Have you any time for me?"
9. Mother asked her daughter: "Help me in the kitchen, please."
10. I asked: "Is it snowing now?"

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## ПЕРЕЧЕНЬ РЕСУРСОВ ИНФОРМАЦИОННО-ТЕЛЕКОММУНИКАЦИОННОЙ СЕТИ «ИНТЕРНЕТ», НЕОБХОДИМЫХ ДЛЯ ОСВОЕНИЯ ДИСЦИПЛИНЫ

Наименование ресурса	Режим доступа
Официальный сайт Министерства сельского хозяйства и продовольствия Ростовской области.	<a href="http://www.don-agro.ru">http://www.don-agro.ru</a>
Официальный портал правительства Ростовской области.	<a href="http://www.donland.ru">http://www.donland.ru</a>
Официальный сайт Экономического сообщества Европейских стран	<a href="http://www.icaew.com">http://www.icaew.com</a>
Справочник по сельскому хозяйству «Банк информации по сельскому хозяйству»	<a href="http://www.agriinfo.in">http://www.agriinfo.in</a>
Официальный сайт Междисциплинарного журнала по современному бизнесу	<a href="http://ijcrb.webs.com">http://ijcrb.webs.com</a>

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**Мальцева Илона Анатольевна**

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