

Е. А. Макарова

АНГЛИЙСКИЙ ЯЗЫК ДЛЯ ПСИХОЛОГОВ

УЧЕБНИК И ПРАКТИКУМ
ДЛЯ АКАДЕМИЧЕСКОГО БАКАЛАВРИАТА

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«Английский язык для психологов» — дважды лауреат Всероссийского конкурса на лучшую научную книгу и удостоен дипломов Фонда развития отечественного образования.

Учебник охватывает широкий диапазон психологических проблем, состоит из семи тематических глав и рассчитан на 380 часов аудиторной работы и 300 часов самостоятельной работы. Тексты предназначены для чтения со словарем и без словаря. Различная сложность текстового материала позволяет использовать их для чтения с пониманием, для перевода, а также для обсуждения и аннотирования на I—II курсах неязыковых вузов. Разнообразные предтекстовые задания помогут студентам лучше усвоить профессиональную лексику, послетекстовые упражнения подготовят их к беседе на профессиональные темы. Задания в каждой главе направлены на развитие речевых и коммуникативных умений и навыков. Групповая и парная работа, предусмотренная в учебнике, поможет преподавателю лучше использовать творческий потенциал студентов. Психологические тесты и логические задачи, анкеты и шуточные задания помогут сделать аудиторские занятия интересными и положительно повлияют на формирование мотивации студентов к изучению иностранного языка. Издание может быть полезно для подготовки к сдаче кандидатских экзаменов и к научно-практическим конференциям.

Русско-английский и англо-русский словарь может быть использован не только при чтении текстов данного издания, но и при переводе научных статей и подготовке докладов при самостоятельном изучении английского языка для профессионального использования.

Соответствует актуальным требованиям Федерального государственного образовательного стандарта высшего образования.

Рекомендовано студентам факультетов психологии высших учебных заведений, а также специалистам в этой области.

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Предисловие

Учебник «Английский язык для психологов» может быть использован для аудиторной работы со студентами, изучающими общую психологию, педагогическую психологию, психологию личности, историю психологии, социологию и педагогику. Он рассчитан приблизительно на 300 аудиторных часов. Тексты в учебнике направлены в первую очередь на развитие всех видов чтения и расширение словарного запаса профессиональной лексики, что особенно важно для дальнейшей профессиональной деятельности студентов и способствует обучению в аспирантуре, а также формированию коммуникативных навыков.

Раздел “Introduction to Psychology” в начале учебника кратко знакомит студентов с основными вехами развития дисциплины, с фактами из жизни знаменитых психологов, там же приведены разделы и направления современной психологии. Здесь же даны термины и выражения, широко используемые в психологии и в сопутствующих науках, которые сопровождаются дефинициями, для того чтобы студенты могли самостоятельно работать над их расшифровкой и переводом. Также даны задания по использованию психологических терминов в речи.

В каждую главу включено несколько текстов различного уровня сложности с заданиями. Тематика текстов охватывает широкий диапазон психологических проблем: от строения и функционирования органов зрения, слуха, обоняния и осязания до работы мозга и психических расстройств. Тексты могут быть использованы для чтения, перевода, обсуждения и аннотирования на разных курсах и со студентами разного уровня языковой и коммуникативной компетентности, а также для работы с аспирантами. Однако необходимо помнить, что данный учебник не является учебником по психологии; он направлен на развитие навыков чтения и разговорной речи на английском языке по профессиональной

тематике и на профессиональном уровне. Многие тексты в учебнике подобраны из научно-популярных журналов. Тематика их может показаться спорной, но именно поэтому они будут вызывать полемику в аудитории и способствовать развитию коммуникативных навыков.

Обсуждение проблем, связанных с тематикой текстов, может подготовить студентов к выступлениям на научных студенческих конференциях, участию в научных спорах и выступлениям и презентациям по специальности.

Структура учебника позволяет начинать работу с любой главы, в зависимости от интереса и потребностей студентов в информации. Можно возвращаться назад и читать предыдущие тексты, которые помогут при чтении текстов последующих. Например, при чтении главы «Восприятие» необходимо вернуться к первой главе и повторить информацию о строении и функционировании органов зрения или слуха. А при чтении текстов «Иллюзии» и «Галлюцинации» необходимо обратиться к информации из текстов «Восприятие» и «Строение органов чувств», чтобы лучше понять природу и причины расстройств восприятия.

Кроме серьезной профессиональной информации, в Приложении можно найти шуточные психологические тексты и анкеты, социологические опросы, психологические и логические задачи и шутки, которые делают работу в аудитории интересной и способствуют формированию мотивации студентов к изучению иностранного языка. Материал, изложенный в разделе “Extension Activities and Brainteasers”, может быть использован студентами как самостоятельно для развития навыков говорения и письменного перевода, так и в качестве дополнительного материала к текстам разных разделов. Ссылки на данный раздел сделаны в каждой главе.

Кроме того, в учебнике содержится глоссарий, в котором наиболее употребляемые в психологии термины сопровождаются дефиницией по-английски, расшифрованы использованные в текстах аббревиатуры, а также приведен англо-русский и русско-английский словарь психологических понятий.

Данный учебник может быть рекомендован тем, кто профессионально интересуется психофизиологическими основами поведения человека и его управлением: студентам и аспирантам, изучающим психологию, психологам, менеджерам — организаторам любой профессиональной деятельности, переводчикам профессиональной литературы, а так-

же специалистам, самостоятельно изучающим английский язык. Учебник может быть использован в научно-исследовательской работе студентов и при подготовке к сдаче кандидатских экзаменов.

INTRODUCTION TO PSYCHOLOGY

What is psychology? How is it connected to biology? What's the origin of the word? **Read the definitions and try to explain in your own words.**

Psycho- is a learned borrowing from Greek meaning *breath, soul, spirit, and mind*. In Greek mythology Psyche (*soul or butterfly*) was the human bride of Eros, the god of love. Before she is allowed to marry Eros she is forced to undergo many difficult ordeals. Apuleius tells the story of Eros and Psyche in his *Metamorphoses*. Psychology was considered a study of the soul.

Psychology is 1) the science of the mind or of mental states and processes; the science of human nature; 2) the science of human and animal behaviour; 3) the sum of the mental states and processes of the person or of a number of persons, especially as determining action (e.g. the psychology of a soldier at the battle). Literally, the word **psychology** means the *science of the mind*. Most contemporary psychologists would define psychology as **the science of the behaviour of organisms**. By behaviour they mean activities and processes that can be observed objectively — both the isolated reactions of muscles, glands and other parts of the organisms and the organized, goal-directed patterns of reaction that characterize the organism as a whole. Psychologists also interpret behaviour to include internal processes — thinking, emotional reactions and the like — which one person cannot observe directly in another but which can be inferred from observation of external behaviour.

Behaviour is determined by a complex of factors that are partly biological, partly anthropological, partly sociological, and partly psychological. Therefore, psychology is closely connected to both the biological and the social sciences. Psychologists study basic functions such as learning, memory, language, thinking, emotions, and motives. They investigate development throughout mental and physical health care. They also treat people who are emotionally distressed. So, it is very important for them to know all about social influences on individuals, the role of the

brain and the nervous system in such functions as memory, language, sleep, attention, movement, perception, hunger, anger and joy.

Although psychology has been concerned primarily with the behaviour of human individuals and groups, it has also dealt with the study of animal behavior. Although great care is always necessary in interpreting human behavior in the light of findings from animal experiments, animal psychology has greatly contributed to study of human beings.

1. What is **physiology**? How is it connected to psychology?

Physiology is the study of the parts and systems of the human body and how they work. You can't learn about the inner world of a person without having an idea about the human physiology. **Physiological psychology** is concerned with the way the body functions and the effect of its activity on behavior.

2. What is **psychoanalysis**? What do you know about it?

Read the definitions.

Psychoanalysis is 1) a systematic structure of theories concerning the relations of conscious and unconscious psychological processes; 2) a technical procedure of investigating unconscious mental processes and for treating psychoneuroses.

3. What **four types of temperament** do you know? In medieval physiology, temperament is any of the four conditions of body and mind: the sanguine, phlegmatic, choleric (or bilious), and melancholic, each of them attributed to an excess of one of the four corresponding humours (body liquids). It is one's customary frame of mind or natural disposition, nature that is excitable, moody, capricious, volatile, etc.

Sanguine (from *sanguis* – *blood*), having the warm passionate, cheerful temperament and the healthy, ruddy complexion of one in whom the blood is the predominant humor of the four. The person is usually heavy, cheerful, confident, red-faced, jolly, generous, self-indulgent optimistic and hopeful sort of person.

Melancholy – black bile in medieval physiology considered to be one of the four humours to come from the spleen or kidney, and to cause gloominess, irritability or depression. Melancholy is a gloomy, pessimistic, quiet and brooding person.

Choleric is having choler as the predominant humour, hence of bilious temperament. In medieval times choler (bile) was considered one of the four humours of the body and the source of anger and irritability. Choleric is a quick-tempered, excitable, aggressive and energetic person, usually thin and wiry.

Phlegmatic — a slow, lethargic, apathetic, hard to rouse to action, sluggish, dull kind of person. Phlegm is a fluid, clammy humour of the body which was believed to cause sluggishness or dullness.

What is **Gestalt psychology**? The German word *Gestalt* means *configuration* or *pattern*. Gestalt psychologists argue that an organism will see an object as a whole. This is because the brain imposes patterns on the raw material of perception. The patterns tend to make complete forms, and incomplete forms are completed by the organizing activity of the brain. When problem solving it is argued that individuals receive “insights” into the total situation: the total pattern suddenly becomes obvious. Gestalt school of psychology that interprets phenomena as organized wholes rather than as aggregates of distinct parts, maintaining that the whole is greater than the sum of its parts. The term *Gestalt* was coined by the philosopher **Christian von Ehrenfels** in 1890, to denote experiences that require more than the basic sensory capacities to comprehend.

Gestalt psychologists suggest that the events in the brain bear a structural correspondence to psychological events; indeed, it has been shown that steady electric currents in the brain correspond to structured perceptual events. The Gestalt school has made substantial contributions to the study of learning, recall, and the nature of associations, as well as important contributions to personality and social psychology. In therapy, the analyst encourages clients to release their emotions, and to recognize these emotions for what they are.

Intelligence, in psychology, the general mental ability involved in calculating, reasoning, perceiving relationships and analogies, learning quickly, storing and retrieving information, using language fluently, classifying, generalizing, and adjusting to new situations. Alfred Binet, the French psychologist, defined intelligence as the totality of mental processes involved in adapting to the environment. Although there remains a strong tendency to view intelligence as a purely intellectual or cognitive function, considerable evidence suggests that intelligence has many facets.

Experimental psychology describes an approach to psychology that treats it as one of the natural sciences, and therefore assumes that it is susceptible to the experimental method. Many experimental psychologists have gone further, and have assumed that all methods of investigation other than experimentation are suspect. In particular, experimental psycholo-

gists have been inclined to discount the case study and interview methods as they have been used in clinical and developmental psychology. Wilhelm Wundt was one of the first experimental psychologists and is credited with starting the first psychology laboratory. **Introspection**, a process used by Wundt in his laboratory, is a way of examining one's own conscious experience through self-observation of one's thoughts, feelings and sensations. **Structuralism**, the name of Wundt's approach to experimental psychology is a system of thought that tried to analyze sensations and subjective experience into its basic building blocks.

Functionalism, another psychological system of thought, focuses on how mental activity enables people to function and survive. **William James** and other supporters of the functionalist movement were opposed to structuralism because they felt consciousness could not be broken down into components as if it were a physical structure.

A key area of debate in psychology has been the extent to which our capacities are learnt versus the extent to which they are innate (this issue is closely related to the more general nature-nurture debate in biology). **Behaviourism** is a system of thought which holds that only strictly observable phenomena are worthy of psychological study. **John B. Watson** is considered to be the "father" of behaviourism. The behaviorism of B. F. Skinner viewed behaviour as being learnt through a process of conditioning — the association of stimuli with responses. The influence of behaviourism took a blow with the work of the **psycho-linguist Noam Chomsky** on language acquisition. Chomsky argued that the stimulus available to an infant was simply not rich enough to allow language-learning through Skinnerian conditioning, and that the human brain must have an innate capacity for, or predisposition towards language learning. This idea that the brain has a specialized Language Acquisition Device in many ways laid the foundation for the field now known as cognitive psychology, which tends to view the mind in terms of more-or-less specialized functions or processes.

Humanistic psychology emerged in the 1950s in reaction to both behaviourism and psychoanalysis. It stresses a phenomenological view of human experience and seeks to understand human beings and their behaviour by conducting qualitative research. Among sciences humanistic psychology focuses on basic and applied science. Humanistic psychology is concerned with the subjective experience of human beings and views using

quantitative methods in the study of the human mind and behavior as misguided and instead stresses qualitative research. It emerged in the 1950s in reaction to both **behaviorism** and **psychoanalysis**. It stresses a phenomenological view of human experience and seeks to understand human beings, rather than conventional statistical one. There is a branch of psychology which uses methods to investigate the subjective experience of human beings; clinical psychology.

Clinical psychology is concerned with helping people who have mental disorders. It is the practice of outpatient mental health treatment. Examples of clinical psychology include psychotherapy, art therapy, and cognitive therapy.

Prior to the 20th century, there was little, if any, help available for sufferers of mental health problems. In the early 20th century, **Sigmund Freud** developed a mental health treatment known as psychoanalysis. In order to practise psychoanalysis, a great deal of training was required of the practitioner. Consequently, the cost of psychoanalysis was also high.

Unlike clinical psychology, **counselling psychology** is generally a joint-venture of both psychology departments and departments of education. Counselling psychologists focus primarily on helping people overcome or better manage pathologies as well as transcend perceived limitations.

Developmental psychology is the study of human growth and changes in behaviour from conception to death. **Jean Piaget** was one of the most famous and influential researchers in developmental psychology. The nature-nurture issue deals with whether human growth results from interaction with others and with the physical world (nurture) or if the key to development is heredity (nature). Jean Piaget, as well as most developmental psychologists today, believed that changes in behaviour result from a combination of nurture and nature.

Psychometric psychology is the psychological specialty involved with developing, administering, and analyzing tests. **James McKeen Cattell**, an assistant to Wundt, was the first psychologist to suggest the term “mental test.” He began using tests to assess how humans used mental ability to solve problems and survive.

Psychiatry is the medical field specializing in mental health issues, thereby overlapping with clinical psychology. Clinical and counselling psychologists often work in co-operation with psychiatrists, social workers, psychiatric nurses and “lay” coun-

selors. Psychiatrists are often involved in providing psychopharmacological care including antidepressant, anti-anxiety, antipsychotic and mood-stabilizing medication. Services aimed at mental or behavioural problems are also often provided by traditional healers and religious counsellors.

Applied psychology is a more general term, referring to solving problems and answering questions that could help solve problems faced by people and society. For example, researching how animals won't eat novel foods after getting ill, even if the food didn't cause the illness, has helped explain why cancer patients have difficulty eating after chemotherapy.

To deal with the problems in psychology you first have to know a certain professional vocabulary that would help you in reading comprehension and expressions of your thoughts. The main purpose of this book is to help you in this mission

Psychology today. Human consciousness is in a place of self-awareness and creating balance as it moves out of the dark ages back to higher frequency of light and thought. To understand how the psyche works, one must understand its nature based on duality, as it seeks to create balance in a world of challenges. We live in a time of recognition that we have issues that we are trying to heal and overcome which has held us back. We combine physical and metaphysical healing to create a union of body, mind and soul. As a bi-polar experiment in time and emotions, the souls have met challenges at every turn, presently facing their issues and seeking help from professionals, books, healers, other.

Activity 1

Read the questions and check if you know the answers. If not, go back to the Introduction and scan it to find the information necessary.

- 1) What is psychology? How is it connected to biology?
- 2) What's the origin of the word?
- 3) What is physiology? How is it connected to psychology?
- 4) Read the definition of psychology as a science and try to explain it in your own words.
- 5) Who are the scientists connected with psychology in their research?

Activity 2

Read the definitions in the text and answer the questions.

- 1) What is psychoanalysis? What do you know about it?
 - a) It is a systematic structure of theories concerning the relations of conscious and unconscious psychological processes.
 - b) It is a technical procedure of investigating unconscious mental processes and for treating psychoneuroses.
- 2) What four types of temperament do you know? Describe each type. Explain on what basis they are differentiated.
- 3) What is Gestalt psychology? What does the German word *Gestalt* mean?

Activity 3

Choose one of the psychologists and get ready to tell the rest of the class about him or her. Make a 5-minute presentation. What do you know about women psychologists? How many names can you list? Make a 5-minute presentation about one of the ladies in psychology.

Activity 4

Study the questions.

- 1) The person given credit for starting psychology as a separate discipline is
 - a) Wilhelm Wundt
 - b) Sigmund Freud
 - c) John Watson
 - d) William McDougall
- 2) The system which focuses on how mental activity enables people to function and survive is called
 - a) structuralism
 - b) functionalism
 - c) behaviourism
 - d) gestaltism
- 3) The area of psychology which would concern itself with studying the effects of aging on various psychological processes is
 - a) clinical psychology
 - b) social psychology
 - c) developmental psychology
 - d) psychometric psychology

-
- 4) John B. Watson is associated with which psychological system?
- a) structuralism
 - b) functionalism
 - c) behaviourism
 - d) gestaltism
- 5) The psychologist credited with developing one of the first useful tests to assess human intelligence is
- a) Jean Piaget
 - b) Alfred Binet
 - c) Floyd Allport
 - d) James McKeen Cattell
- 6) A way of examining one's own conscious experience through self-observation of one's thoughts, feelings and sensations is
- a) introspection
 - b) structuralism
 - c) functionalism
 - d) behaviourism
- 7) A system of thought that tried to analyze sensations and subjective experience into its basic building blocks is
- a) introspection
 - b) structuralism
 - c) functionalism
 - d) behaviourism

Chapter 1

THE SENSE ORGANS

*(A review of basic grammatical structures:
Present Tenses, Passive Voice)*

In the **Introduction** you have learned that physiology is the study of the different systems of the human body and what they do. You cannot learn about psychology without knowing how human body works and how its work affects a person's inner world. In this chapter, you will read more about human **physiology**, about the sense organs in the human body. The sense organs are more commonly called the five senses — they are the ears, nose, eyes, tongue, and skin. The five senses are hearing, smelling, seeing, tasting, and touching. Your senses give information to your brain to help you move, control, and protect your body. You will learn more about the five senses and how they work in your body.

Reading 1

We see with our eyes. We hear with our ears. We taste with our tongue. We feel with our skin. We smell with our nose. Skim the Reading to find the answer to the question: What causes sound?

DETAIL QUESTIONS

Read and find the details in the text.

- 1) Name the three parts of the ear.
- 2) What happens to the eardrum when sound waves hit it?
- 3) What are the three small bones in the ear called?
- 4) How did they get their names?
- 5) What presses on the hearing nerve cells?
- 6) What do nerves inside the ear do?

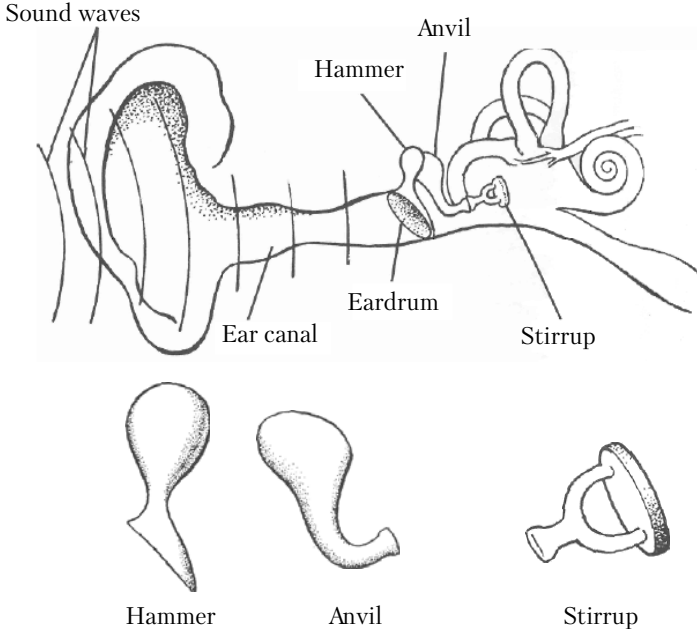
The sense of hearing

A bell rings, a baby cries, and a dog barks. Every day we hear thousands of sounds. Our world is full of sound. What causes sound? How do our ears let us hear sounds?

Sound is caused by vibrations, the quick back-and-forth movements of an object. The vibrations move through air, water, the ground, or some other substance. The vibrations move in waves. They are called sound waves. In order to understand how people hear sound waves, you must understand how the ear works.

There are three important parts of the ear: the ear canal, the eardrum, and the small bones. Each part is important for hearing. Sound waves enter the ear through the ear canal and hit the eardrum. The eardrum is a thin skin that is stretched tightly across the inside of the ear. It is like the material that is stretched across the top of a drum.

The eardrum begins to vibrate, or move back and forth quickly. This vibration causes three very small bones in the ear to vibrate. These little bones are called the hammer, anvil, and stirrup. They get their names because they look like these objects.



The small bones in the ear

How do you hear? These vibrations of the eardrum cause more vibrations in a liquid that fills the deepest part of the ear. The moving liquid presses on the hearing nerves. These nerves pass the sound message on to the brain. When the message reaches the brain, the person can hear the sounds.

It is important for humans to be able to hear sound. Sounds can warn of danger and emergencies. If you see a person cross the street into the path of an oncoming car, you would call to the person to watch out. The driver of the oncoming car would honk the horn to warn the person. Fire alarms warn people of fire. Sirens on ambulances and police cars tell you to move to the side. Some people cannot hear. They are deaf and cannot be warned of danger in the same way.

In this Reading you learned about the sense of hearing, about the ear and how humans hear. Next you will learn about two more senses. These are the senses of taste and smell.

GRAMMAR CHECK

1. Read the passage and complete it using the correct verb forms (Present Simple, Active and Passive Voice).

A hearing impairment or hearing loss is a full or partial decrease in the ability to detect or understand sounds. Caused by a wide range of biological and environmental factors, loss of hearing can happen to any organism that (*to perceive*) sound.

Sound waves (*to vary*) in amplitude and in frequency. Amplitude (*to be*) the sound wave's peak pressure variation. Frequency (*to be*) the number of cycles per second of a sinusoidal component of a sound wave. Loss of the ability to detect some frequencies, or to detect low-amplitude sounds, that an organism naturally (*to detect*), (*to be*) a hearing impairment.

Hearing sensitivity (*to indicate*) by the quietest sound that an individual can (*to detect*), called the hearing threshold. In the case of people and some animals, this threshold can ... accurately (*to measure*) by a behavioural audiogram. A record (*to make*) of the quietest sound that consistently (*to prompt*) a response from the listener. The test (*to carry out*) for sounds of different frequencies. There are also electro-physiological tests that can (*to perform*) without requiring a behavioural response.

A hearing impairment (*to exist*) when an individual is not sensitive to the sounds normally heard by its kind. In human beings, the term hearing impairment ... usually (*to reserve*) for people who (*to have*) relative insensitivity to sound in the speech

frequencies. The severity of a hearing impairment (*to categorize*) according to how much louder a sound must (*to make*) over the usual levels before the listener can (*to detect*) it. In profound deafness, even the loudest sounds that can (*to produce*) by the instrument used to measure hearing – audiometer – may not (*to detect*).

2. Read the passage and complete 5 questions about it.

Many different assistive technologies, such as hearing aids, are available to people who are hearing impaired. People with cochlear implants, hearing aids, or neither of these two devices also use additional communication devices to reduce the interference of background sounds. Three types of wireless exist along with hard-wired devices. A wireless device used by people who use their residual hearing has two main components. One component sends the sound out to the listener, but is not directly connected to the listener with the hearing loss. The second component of the wireless system, the receiver, detects the sound and sends the sound to the ear of the person with the hearing loss. Hearing dogs, a category of assistance dogs, are trained to help those with hearing impairments. The advent of the Internet's World Wide Web and closed captioning has given the hearing impaired unprecedented access to information. Electronic mail and online chat have reduced the need for deaf and hard of hearing people to use a third-party Telecommunications Service in order to communicate with the hearing people.

- 1) What assistive technologies are ...?
- 2) What are additional communication devices ...?
- 3) How is the ... different from ...?
- 4) What other ...?
- 5) Why is ...?

3. Read the sentences and use passive forms of the verbs in parenthesis.

- 1) Hearing loss (*to categorize* – Present Simple) by its severity and by the age of onset.
- 2) The severity of hearing loss (*to measure* – Present Simple) by the degree of loudness.
- 3) Hearing loss (*to rank* – Present Simple) as mild, moderate, severe or profound.
- 4) Measuring hearing loss in terms of a percentage (*to compare* – Present Simple) to measuring weight in inches.

- 5) The quietest sounds you could hear at different frequencies (*to plot* – Past Simple) on an audiogram to reflect your ability to hear at different frequencies.
- 6) A special technology (*to develop* – Present Perfect) by the Ear Institute, and (*to intend* – Future Simple) to measure an ability to understand speech in quiet and noisy environments.
- 7) Unlike pure-tone tests, where only one ear (*to test* – Present Simple) at a time, this technology evaluates hearing using both ears simultaneously.
- 8) The eyes (*to regard* – Present Simple) as the most important nonverbal message system.
- 9) Decibels of loss (*to convert* – Future Simple) via a recognized legal formula.
- 10) It (*to find* – Present Perfect) that listeners gaze at speakers more than speakers gaze at listeners.
- 11) Hearing loss (*to tie* – Present Simple) to their inability to pick up auditory social cues.
- 12) The words “suggest” and “suggestion” (*to use* – Past Simple) in senses very close to those which they have in common speech.
- 13) Hearing dogs, a category of assistance dogs, (*to train* – Present Simple) to help those with hearing impairments.
- 14) Experiments on suggestion, in the absence of hypnosis, (*to conduct* – Past Simple) by early researchers.

BUILDING VOCABULARY

4. The following words define the parts of the ear responsible for hearing except two. Find and cross them out.

Hammer, sound waves, eardrum, anvil, message,
ear canal, hearing nerves, stirrup

- a) Match the verbs and the nouns from the chart below, write the phrases in your notebook. You can get more than six of them. Don't forget to translate the phrases:

honk	the	names
reach		person
pass		ear
enter		horn
get		brain
warn		message

b) Make phrases using the prepositions.

Through	some substances
In	hearing
To	the path
For	the side
On	air
Into	ground
	ear canal
	hearing nerves
	water
	hearing

USE CONTEXT CLUES

5. Do not look up every unfamiliar word in the dictionary. Get into the habit of guessing meaning from context. Read this passage from the text and use the context to guess what the words in bold probably mean. Copy the words in italics, identify the adjectives they are derived from and translate them.

In children, hearing loss can lead to social isolation for several **reasons**. First, the child experiences delayed social development that is in large part tied to **delayed** language **acquisition**. It is also *directly* tied to their inability to pick up auditory social cues. This can result in a deaf person becoming *generally* **irritable**. A child who uses sign language, or identifies with the deaf **sub-culture** does not generally experience this isolation, *particularly* if he/she attends a school for the deaf, but may *conversely* experience isolation from his parents if they do not know **sign language**. A child who is *exclusively* or *predominantly* oral (using speech for communication) can experience social isolation from his or her hearing **peers**, particularly if no one takes the time to *explicitly* teach her social skills that other children acquire *independently* **by virtue** of having normal hearing. *Finally*, a child who has a severe impairment and uses some sign language may be **rejected** by his or her deaf peers, because of an understandable **hesitation** in **abandoning** the use of **existent** verbal and speech-reading skills. Some in the deaf community can view this as a **rejection** of their own culture and its mores, and therefore will reject the individual *preemptively*.

VOCABULARY CHECK

6. Here are some important words from this Reading. Do you understand all of these words? Talk about the meaning of these words with your partner. See if you can use them in the sentences of your own.

Anvil, brain, deaf, ear canal, eardrum, hammer, sound, waves, stirrup, vibrate, vibration

If you know all the words, continue to Reading 2.

Reading 2

Skim the Reading to find the answer to the question: What sense organs do people use for taste and smell?

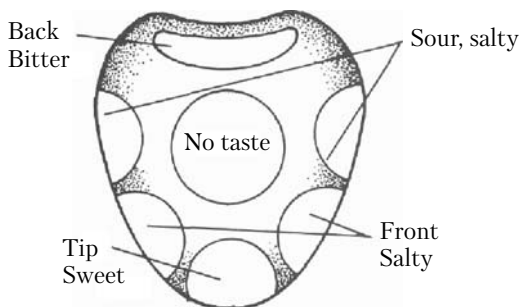
DETAIL QUESTIONS

Read and find the details in the text.

- 1) What are the bumps on the tongue called?
- 2) What is located inside the bumps on your tongue?
- 3) Where are sweet things tasted?
- 4) What is an odor?
- 5) Why do people sniff?
- 6) What is the psychological mechanism of smelling and tasting?
- 7) How is it connected to brain?
- 8) What is the name of smell and taste system?
- 9) Why is it important to be able to smell things?
- 10) What is aromatherapy based on?

The senses of smell and taste

Why does a potato chip taste salty? Why does sugar taste sweet? There are two sense organs you use to taste. One of these sense organs is the tongue. If you look in the mirror and stick out your tongue, you will see little bumps on it. These bumps are called papillae. Inside each of these bumps are tiny taste buds. Taste buds are cells that are connected to nerves. The nerves carry messages about the food you eat to the brain. The nerves tell your brain how something tastes. You can taste if something is bitter, sour, sweet, or salty. Look at the picture below to see where the taste buds are located and the different tastes you experience



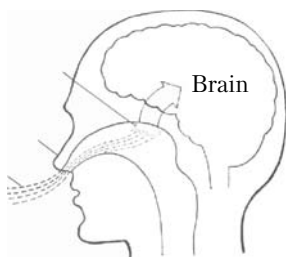
The taste areas of the tongue

You taste bitter things at the back of your tongue, sour and salty things on the sides, and sweet things on the tip. The tongue is only one part of the sense of tasting.

The other sense organ you use to taste is your nose. The nose is also the sense organ you use to smell. The smell of food plays a big part in how food tastes. If food smells good, it usually tastes good! Sometimes when you have a cold and your nose is stopped up, you cannot smell anything. When this happens, nothing you eat will taste very good either. Everything that has a smell gives off a small amount of gas. This gas is called an odor.

When you breathe in, the odor enters your nose. Some things have a weak odor. When things have a weak odor, you have to sniff to bring the odor into your nose. There are special nerves in the nose that send the “smell message” to the brain. The picture below shows how the sense of smell works.

Odor enters through the nose and passes to the nerves. The nerves send a “smell message” to the brain.



Is it important to be able to smell things? Your sense of smell protects you from danger. You smell smoke when there is a fire. Food begins to smell bad when it is no longer good to eat. Animals such as skunks spray a liquid that has a bad odor to protect them from danger.

In this reading you learned about the senses of taste and smell and their two sense organs, the tongue and the nose. You also learned why these two senses are important.

How do smell and taste work? Smell and taste belong to our chemical sensing system, or chemo sensation. The complicated processes of smelling and tasting begin when molecules released by the substances around us stimulate special nerve cells in the nose, mouth or throat. These cells transmit messages to the brain, where specific smells or tastes are identified.

Olfactory (smell nerve) cells are stimulated by the odours around us – the fragrance from a rose, the smell of bread baking. These nerve cells are found in a tiny patch of tissue high up in the nose, and they connect directly to the brain.

Taste cells react to food or drink mixed with saliva and are clustered in the taste buds of the mouth and throat. Many of the small bumps that can be seen on the tongue contain taste buds. These surface cells send taste information to nearby nerve fibers, which send messages to the brain.

Taste and smell cells are the only cells in the nervous system that are replaced when they become old or damaged. Scientists are examining this phenomenon while studying ways to replace other damaged nerve cells.

A third chemosensory mechanism, called *the common chemical sense*, contributes to our senses of smell and taste. In this system, thousands of free nerve endings – especially on the moist surfaces of the eyes, nose, mouth and throat – identify sensations like the sting of ammonia, the coolness of menthol and the “heat” of chili peppers.

GRAMMAR CHECK

1. Complete this passage using the correct past forms of the verbs in parentheses.

One test group (*to consist*) of thirty-one subjects who (*to give*) 46 different aromas to assess, such as peppermint, pizza, parsley, buttered popcorn, orange, and chocolate and a variety of combinations. Blood pressure of each subject (*to measure*) after inhalation of the various scents. According to the study the following foods significantly (*to increase*) blood flow and blood pressure in the participants: Lavender and Pumpkin Pie, Doughnuts and Licorice, Pumpkin Pie and Licorice. While none of the aromas (*to decrease*) blood flow, all aromas (*to have*) some health enhancing effect, some more than others. Some participants (*to respond*) most to strawberry, older people (*to experience*) the greatest health and mood enhancement with vanilla, lavender, and oriental spice.

2. Read the passage and complete it with the correct verb form (Present Simple, Present Progressive, Active and Passive Voice).

We can commonly (*to identify*) four basic taste sensations: sweet, sour, bitter and salty. Certain combinations of these tastes along with texture, temperature, odour and the sensations from the common chemical sense (*to produce*) a flavor. It is flavour that (*to let*) us know whether we (*to eat*) peanuts or caviar.

Many flavours (*to recognize*) mainly through the sense of smell. If you hold your nose while eating chocolate, for example, you will have trouble identifying the chocolate flavour, even though you can (*to distinguish*) the food's sweetness or bitterness. This is because the familiar flavour of chocolate (*to sense*) largely by odour. So is the well-known flavour of coffee. This is why a person who (*to wish*) to fully savour a delicious flavour, for example, an expert chef who (*to test*) his own creation, will exhale through his nose after each swallow.

BUILDING VOCABULARY

3. a) Group the following words according to whether they describe the sense of taste or smell, or both.

Brain, papillae, tongue, throat, smell, odour, nerves, organs, salty, sweet gas, sniff, bitter, buds, smoke, olfactory, sour, nose, bumps, fragrance

Taste	Smell	Both

b) Translate the following word combinations from the text:

The sting of ammonia, the coolness of menthol and the "heat" of chili peppers

c) Find all the word combinations with the word *nerve* and translate them.

VOCABULARY CHECK

4. Here are some important words from this Reading. Do you understand all of these words? Talk about the meaning of these words with your classmates. See if you can use them in the sentences of your own.

Bitter, nose, odour, salty, sense, sniff, organs, sour, sweet, taste, buds, tongue, papillae, olfactory, swallow, fragrance

If you know all the words, continue to Reading 3.

Reading 3

Skim the Reading to find the answer to the question: Could you name the main parts of the eye?

DETAIL QUESTIONS

Read and find the details in the text.

- 1) What is the function of the iris?
- 2) When does the pupil change size?
- 3) Name two important functions of the eyelid.
- 4) On which part of the eye does a picture form?
- 5) How does the brain help you to see?
- 6) Name a common eye problem.
- 7) How can eye problems be corrected?
- 8) Why are human eyes better than a camera? Find the proof in the text.

The sense of sight

Which part of your body lets you read the book, check out a rainbow, and see a ball heading your way? Which part lets you cry when you are sad and makes tears to protect itself? Which part has muscles that adjust to let you focus on things that are close up or far away? If your guess is the eye, you are right!

The eye is the sense organ of sight. You see with your eyes. Your eyes work like a very good camera. They can take pictures that are still or moving, in color or in black and white, and from a distance or close up. Of course, your eyes are better than a camera! In this reading you will learn how your eyes work and how you see.

The eye is made up of different parts: the iris, pupil, eyelid, and retina. The picture below shows the different parts of an eye.