

Text A. Biology

Part 1

1) Read the words with their definition

living things / living beings - a person or thing that exists

exist - to be, or to be real

cell - the smallest basic unit of a plant or animal

complicated – involving a lot of different parts

living creature - any large or small living thing that can move independently

branch – a part of something larger

insect - a type of very small animal with six legs, a body divided into three parts and usually two pairs of wings

2) Read the text and write true or false. If false explain why.

Biology

Biology is the study of all living things. They include living beings from the tiniest one-celled plant to the biggest tree, and from tiny one-celled animals to man himself. Man is the most complicated of living creatures. Scientists who study biology are called biologists.

The two main branches of biology are botany, which is the study of plants, and zoology, which is the study of animals. Many biological sciences apply to both plants and animals. Thus, anatomy deals with the way they are put together while physiology deals with the way the different parts of plants and animals work. There are also various names for the study of different groups of animals. A person who studies birds is an ornithologist, one who is particularly interested in insects is an entomologist, and so on.

1. Biology is the study of all living things
2. Scientists who study biology are called ornithologist.
3. The two main branches of biology are botany and zoology.
4. Botany is the study of plants.
5. Anatomy deals with the way plants and animals are put together.

3) Translate the words and word-combination from the text

Вчення, біолог, жива істота, одноклітинна рослина, тварини, крихітний, галузі біології, комахи, птахи, ботаніка, фізіологія, анатомія.

4) Answer the questions

- What is biology?
- With what does anatomy deal?

Text A. Part 2

1) Read the words with their definition

Apes - an animal like a large monkey with no tail, that uses its arms to move through trees

130 A.D. - stands for Anno Domini, which is Latin for “year of our Lord,” and it means the number of years since the birth of Jesus Christ.

Description - something that tells you what something or someone is like

Shape - the particular physical form or appearance of something

Scientist - an expert who studies or works in one of the sciences

Bone - any of the hard parts inside a human or animal that make up its frame

Muscle - one of many tissues in the body that can tighten and relax to produce movement

2) Read the text and answer the questions

Man has always wanted to find out about the plants and animals around him and also how his own body works. The first people who wrote anything down about biology were probably the Greeks. Aristotle was the greatest of the Greek biologists and he dissected fishes and many other animals to see how they are made.

In order to find out more about the human body, Galen, a Greek doctor and philosopher, dissected apes and many other animals as well as the bodies of people. Galen was born in 130 A.D. and he wrote descriptions of what he saw, one of the most famous is his essay on the hand. After this, very little new work was done in biology for a very long time although artists were fascinated by the beautiful shapes of plants and animals and of the human form. One of the greatest of these artists was the Italian Leonardo da Vinci, who was also a scientist, and an engineer. He made many wonderful drawings of such parts of the human anatomy as bones and muscles..

- How are scientist studying biology called?
- Who were the first people wrote anything down about biology?
- What Aristotle did to see how animals are made?

3) Find the antonyms

tiny	complicated
simple	different
the same	dissecte
put together	false
true	big

4) Translate the words and word-combination from the text

Кістка, біологія, опис, риба, людська форма, науковець, м'язи, анатомія людини, розчленувати рибу,

Text A. Part 3

1) Read the words with their definition

Influence – the power to have an effect on people or things

Invention – something that has never been made before, or the process of creating something that has never been made before

Arrangement – a plan for how something will happen

Specimens - something shown or examined as an example; a typical example

At the same time books, especially on plants, were being illustrated by hand. People still read the old books but they never thought of finding out for themselves whether what they read was true. Then Andreas Vesalius, who was a Belgian, wrote a book on the anatomy of the human body. This was published in 1543 and it had a very great influence on biology. Vesalius showed that Galen had been wrong in many of his statements. This encouraged scientists to test things for themselves and not to believe everything they read in books.

Then an enormous step forward was taken with the invention of the microscope. In the 17th century John Ray and Francis Willughby put the flowering plants into different families and grouped animals according to the arrangement and structure of their fingers, toes and teeth. This work of classification was continued by Linnaeus of Sweden, who collected specimens of plants and animals from all over the world. By using his scheme it is possible to put any plant or animal into its class, its order, its family, then into a genus and finally into a species.

2) Translate the words and word-combination from the text

Проілюструвати від руки, дізнаватися(знаходити), правда, людське тіло, вплив(впливати), перевіряти, класифікація, величезний крок вперед, винайдення мікроскопу, структура, палець(на руці), палець(на нозі), зразки, схема.

3) Put in the correct order

genus - class - family – order - species

Text A. Part 4

1) Read the words with their definition

Heredity – the process by which characteristics are given from a parent to their child through the genes

Gene - a part of the DNA in a cell that controls the physical development, behaviour, etc.

Generation – all the people of about the same age within a society or within a particular family

Environment - the air, water, and land in or on which people, animals, and plants live

Effect - the result of a particular influence

The work of Lamarck and Darwin led scientists to study both heredity, the passing on of characteristics from one generation to another, and environment, the surroundings in which they live. The 20th century has seen the development of biochemistry. Biochemists have discovered the stages in which the body acts on the complex chemicals it contains, in order to renew itself.

Biological studies today include microbiology, the study of microscopic organisms, molecular biology, the study of molecules in biology and marine biology, the study of life in the oceans. In many of these fields, biologists are interested in the relation between living things and their surroundings and especially the effects of man on his environment.

2) Translate the words and word-combination from the text

Спадковість, навколишній світ, біолог, оточення, мікроскопічні організми, молекули, океан, морська біологія

3) Match the science with what it studies

1. microbiology	a) is the study of life in the oceans
2. biology	b) is the study of animals
3. molecular biology	c) is the study of microscopic organisms
4. marine biology	d) is the study of molecules
5. zoology	e) is the study of plants
5. botany	f) is the study of all living things

4) Fill in the gaps

arrangement biochemists biologists bones branches fingers

1. Scientists who study biology are called

2. The two main of biology are botany and zoology

3. Parts of the human anatomy are and muscles.

4. They grouped animals according to the and structure of their, toes and teeth.

5. have discovered the stages in which the body acts on the complex chemicals it contains, in order to renew itself.

5) Retell the text