

**Електронний навчально-методичний комплекс дисципліни (ЕНМКД)
«Наукова іноземна мова (англійська)» для дистанційного навчання**

LESSON 2

THEME: LANGUAGE OF SCIENCE

READING

Text LANGUAGE OF SCIENCE

Знати:

- Terminological minimum within the thematic framework: Exercises IV - IX, p. 3-4.
- English equivalents of specific words and phrases intrinsic to scientific language style: Ex. VII, p. 4.

Вміти:

- Read and translate the text "Language of Science".
- Answer the questions using key words and their definitions: Ex. III, p.3.
- Ask all possible questions based on the issues of the text.

SPEAKING (Ex. X, p.4)

Знати:

- Content and vocabulary, primarily terminology of the Text.
- Distinctive features of the language of science
- Distinguish between lexical and grammatical peculiarities intrinsic to sci-tech texts.

Вміти:

- Ask and answer questions within the topic on scientific language style.
- Participate in the discussion on the related issues.
- Be able to speak about the main characteristics of the sci-tech language.

I Pronounce the following words:

matter	architecture	science
substance	structure	reaction
transform	construction	technology
term	notion	concept
vocabulary	hypothesis	industry
language	fundamental	terminology

II Pronounce the following word combinations:

fundamental science	synopsis
vital part	scientific publication
natural science	academic rank
composition of substances	research technique
building construction	

LANGUAGE OF SCIENCE

Science reflects the world in specific notions and concepts, elaborating its own language. This language is highly terminological and many scientific terms are of Greek and Latin origin, e.g. synthesis, analysis, syllabus, matter, substance, solution, function, quantum physics, etc. The term geology for example was coined from two Greek words meaning “earth” and “word”, or “study of”, the same can be said of biology formed from Greek words which mean “life” and “study of”. Ecology originated from Greek “oikos” (“house”) and “logos” (“study of”).

Another peculiarity of the vocabulary is a large number of formal words and expressions in comparison with everyday standard English. A scientist uses the words *to discover*, *to investigate*, *to encounter* when he speaks about scientific problems, but prefers to say *to find out*, *to look into*, *to come across* or *to meet with* in informal situations.

Appropriate usage of words is always a question of the right choice, and this rule is also valid for grammar structures. The language of science is characterized by the impersonal style; therefore a scientist would rather write *Interesting results are obtained* than *I obtain interesting results*.

For the longest time, science remained descriptive. No wonder, descriptive manner of writing where preference is given to the Present Simple structures and definition- or characteristic-like sentences, is frequent in its language.

A high level of theorization characterizes modern science with its hypothesis making and discussions. This demands quite different language style, hypothetical speculations with subjunctive mood structures, modals, conditional clauses, etc.

A scientist not only describes facts or processes, but also narrates them, referring to a past or future period of time; in this case he preferentially uses the Past Simple or Future Simple Tense forms. Dates and proper names are typical for such narration.

Scientific languages have highly standard system of publications, among which there are monographs, articles, reviews, lectures, theses, abstracts, textbooks, etc. Not only is the structure of such publications unified, but also style of writing, which in fact is a combination of description, narration and reasoning. Scientific journals want their authors to document their articles according to scientific style and format. Scientific writing should be concise, not wordy, clear and informative.

The languages of technical sciences with all their peculiarities have much in common. General trend of unification and standardization, which facilitates communication of scientists of different disciplines and countries, is actively at work.

III Answer the questions.

1. What is the origin of the word “architecture”?
2. What is the modern definition of this science?
3. What is the origin of many scientific terms?
4. What are specific features of the grammar of the language of science?
5. When does a scientist use a descriptive manner of writing?
6. What tense forms are typical for narration?
7. What types of scientific publications are there

in scientific literature? 8. How can you describe the style of scientific writing? What does it combine? 9. What does the word “cybernetics” mean?*

IV According to the text, the vocabulary of the language of science is composed of:

- a) short words
- b) formal expressions
- c) terms
- d) metaphors
- e) Latin words/elements.

V Study the definitions of the following keywords:

Architecture	- designing and constructing buildings and other structures.
Scientific Style	- scientifically accurate, concise, clear, consistent and complete manner of expression in writing or speech.
Hypothesis	- a supposition or proposed explanation made based on limited evidence as a starting point for further investigation.
Reasoning	- thinking and forming judgements logically to persuade (someone) with rational argument.
Term	- word or word combination denoting scientific notion.
Notion	- a conception of or belief about something, which reflects objects and phenomena in their characteristic properties.

VI What terms correspond to the following definitions?

Science and art of designing and constructing buildings and other structures.
Manner of writing with preferential present tense forms and characteristic-like sentences.
Special word used to define a scientific notion.
The term coined from Greek words meaning “house” and “study of”.
Greek word meaning “word” or “study of”.
Science studying history of earth development, its structure and composition.

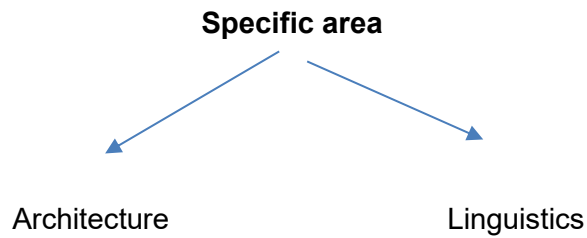
VII Write English equivalents of the following phrases:

Слова грецького походження, проектування та будівництво конструкцій, опис, детальне розуміння, наукова письмова мова, особливість словника, умовний спосіб, високий рівень теоретизації, правильне використання, велика кількість, мовний стиль, теоретичні розмірковування, науковий стиль, оповідання, власні імена, наукова публікація, наукове спілкування, аргументація, безособовий стиль.

VIII In each column pick up the word closest in meaning to the word in bold:

Study	Change	Term	Notion
investigation	motion	symbol	idea
work	transformation	sign	image
analysis	transfer	special word	concept
treatment	exchange	word	word

IX Arrange the words from the list according to the specific area of usage.



List of words: façade, analysis, term, gable, definition, vocabulary, design, blueprint, transformation, tense form, style, roof, metal, narration, canopy.

X Analyze the text and name five (or more) distinctive features of the scientific language style.

* The word *cybernetics* comes from Greek κυβερνητική (*kybernetike*), meaning "governance", i.e., all that are pertinent to κυβερνάω (*kybernao*), the latter meaning "to steer, navigate or govern". Contemporary cybernetics began as an interdisciplinary study connecting the fields of control systems, electrical network theory, mechanical engineering, logic modeling, evolutionary biology, neuroscience, anthropology, and psychology in the 1940s.