Вторая строка

Третья строка

Четвертая строка

Пятая строка

Шестая строка

Седьмая строка

Восьмая строка

Девятая строка

Десятая строка

Одиннадцатая строка

Двенадцатая строка

Тринадцатая строка

Четырнадцатая строка

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Восемнадцатая строка

Девятнадцатая строка

Двадцатая строка

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<th>Групповые занятия</th>
<th>Занятия лекционного типа</th>
<th>Занятия семинарского типа</th>
<th>Индивидуальное задание</th>
<th>Заключительный мониторинг</th>
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9. Сопровождение индивидуальной работы на занятиях, выполнения домашних заданий, контрольное оценивание на занятиях, защита дипломного проекта, получение справок и выполнение других организационных мероприятий.
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<th>76</th>
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</tbody>
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[Text in Cyrillic script, not legible due to the nature of the script.]

[Translation note: The text is in Cyrillic script and is not legible due to the nature of the script.]

[End of text]
При развитии навыков устной речи особое внимание уделяется порядку слов как в докладе коммуникативных типов предложений, так и внутри предложения. В качестве учебных текстов используются отрывки из различных учебных источников по тематике непрерывного и факультативного обучения, изучаемых в рамках различных курсов. Материалы включают интенсивные упражнения на слуховые и говоровые навыки, а также дикцию.

Общая объемная характеристика дисциплины описывает:

- основные виды самостоятельной работы:
  - решение задач по учебнику;
  - чтение и анализ учебной литературы;
  - подготовка к семинарским занятиям;
  - выполнение домашних заданий;
  - участие в научной работе;

- специфика учебного плана:
  - возможность выбора изучаемых направлений;
  - возможность самостоятельного планирования времени;
  - комплексный подход к оценке знаний.

Требования к уровню знаний:

- сформированность навыков устной и письменной речи;
- умение анализировать и синтезировать информацию;
- владение методами научного познания;
- развитие творческих способностей.

Основные требования к будущей специалисту:

- обладание навыками коммуникативных навыков;
- умение работать в команде;
- готовность к самостоятельной работе;
- способность к адаптации и обучению на протяжении всей трудовой деятельности.

Используя разработанные для подготовки к дисциплине методические рекомендации, студенты могут активно работать над усвоением новой информации, а также применять полученные знания в реальной жизни.
5. Why are rhesus monkeys used in research on various diseases? How can these studies help advance our understanding of human health and disease?

4. How can animal models contribute to human medical research and drug development?

3. What role does animal testing play in the scientific community?

2. Why are animal experiments necessary in scientific research? What ethical considerations must be taken into account?

1. What are the potential benefits of using animal models in scientific research?
The Use of the Hierarchical Classification System

- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species

Classification helps us to group organisms into categories and understand their relationships. It allows us to identify and distinguish between different groups of organisms based on shared characteristics.

<table>
<thead>
<tr>
<th>Level</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingdom</td>
<td>All living things share certain characteristics, such as cellular organization.</td>
</tr>
<tr>
<td>Phylum</td>
<td>Organisms within a phylum share more specific characteristics, such as body structure.</td>
</tr>
<tr>
<td>Class</td>
<td>Organisms within a class share even more specific characteristics, such as life cycle.</td>
</tr>
<tr>
<td>Order</td>
<td>Organisms within an order share characteristics that further refine their classification.</td>
</tr>
<tr>
<td>Family</td>
<td>Organisms within a family share characteristics that further refine their classification.</td>
</tr>
<tr>
<td>Genus</td>
<td>Organisms within a genus share characteristics that further refine their classification.</td>
</tr>
<tr>
<td>Species</td>
<td>Organisms within a species share characteristics that are unique to that species.</td>
</tr>
</tbody>
</table>

This hierarchical system helps scientists to organize and understand the diversity of life. It allows for clear communication and comparison of different organisms.
1. Euphorbia (sp.)
2. Euphorbia (sp.)
3. Euphorbia (sp.)
4. Euphorbia (sp.)
5. Euphorbia (sp.)
6. Euphorbia (sp.)
7. Euphorbia (sp.)
8. Euphorbia (sp.)
9. Euphorbia (sp.)
10. Euphorbia (sp.)

Translate into English:

1. System
2. Reducer
3. Regulator
4. Vines
5. Phosphorus system

4. Explain the terms:

1. A race or variety. For some periods, until the environment is again warm enough.
2. An exercise that usually lasts a long time and often affects a particular part of the body.
3. A specific illness that is caused by bacteria and that does not usually last a long time.
4. A long period of time when there is little or no rain.
5. A long period of time when there is little or no rain.
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8. A long period of time when there is little or no rain.
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10. A long period of time when there is little or no rain.

3. Give the terms corresponding to the following definitions:

1. The process of combining cell components.
2. The term used to describe a type of reaction.
3. A form of cell division that helps to produce new individuals.
4. The central part of a thread, containing chromosomes.
5. The sequence of number, decreasing, and classifying organisms.
6. The process of obtaining, describing, and classifying organisms.
7. The process of obtaining, describing, and classifying organisms.
8. The process of obtaining, describing, and classifying organisms.
9. The process of obtaining, describing, and classifying organisms.
10. The process of obtaining, describing, and classifying organisms.

11. Euphorbia (sp.)
12. Euphorbia (sp.)
13. Euphorbia (sp.)
14. Euphorbia (sp.)
15. Euphorbia (sp.)
16. Euphorbia (sp.)

Consolidation of organisms has many uses. First, it helps scientists understand the relationships between different species. This is important because it helps us understand how organisms are related and how they have evolved. It also helps us understand how organisms interact with each other and with their environment.

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1. A race or variety. For some periods, until the environment is again warm enough.
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10. The process of obtaining, describing, and classifying organisms.
The distance between Earth and Mars varies. Astronauts would have to walk for nearly two years to get there, but their spacecraft would have to carry vast amounts of fuel. The distance between the planets is covered by spaceships. Even at the speed of light, it would take humans hours to travel, making space travel a challenge. However, with the advancement of technology, we can now reach other planets and take advantage of the resources they offer. In this way, we can explore the idea of space travel and in the future, we can travel beyond our solar system.

**Will human beings ever live on other planets?**

6. Choose the best word, A, B, or C, for each gap.

8. Complete the sentence with the suitable form of the verb in brackets.

7. Complete the sentence with the correct form.

The Earth, after humans...

- disappeared
- disappeared (disappear (disappeared) humans, name b (be) in brackets)
Interview: and why is so important that we use less single-use plastic? These days come from new needs.

INTERVIEWER: And why is so important that we use less single-use plastic? These days come from new needs.

Fiona Rehberger: In other words, we need to make 20 times over one lifetime, and nearly all of that is simply thrown away. Apart from the books we keep, it is estimated that approximately 250 kilograms of paper are thrown away every year in the UK. This may seem like a small amount, but when you consider that it takes 12.5 million tonnes of paper to produce 200 kilos of paper annually, the impact is significant. The figure is only a fraction of the world's total use of paper, which is approximately 335 million tonnes.

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1. You are examining a cell from a crime scene using an electron microscope. It contains ribosomes, DNA, a plasma membrane, a cell wall, and microtubules. What type of cell is it?

2. If you could design a cell that could repair itself, what components might you incorporate to enable this function?

3. How do ribosomes synthesize proteins? What are the key steps involved in this process?

4. Explain the role of microtubules in cellular transport. Where are they found, and what are their functions?

5. What is the function of the cell wall in plant cells? How does it contribute to the structural integrity of the cell?

6. In plants, the cell wall is composed of cellulose. How does this material contribute to the strength and rigidity of the cell? What other materials are typically found in the cell wall besides cellulose?
c. plasma membrane

2. a prokaryote converts food energy into the chemical energy of ATP

b. flagella

- c. ribosomes

- d. cell wall

- e. sperm cell
7. An electron micrograph shows that a cell has extensive amounts of rough ER throughout. One can deduce from this that the cell is:

- c. chela
- d. ileal
- e. cell adhesion molecules
- f. desmosomes
- g. plasma membrane

6. Which of the following are cytoplasmic whose function is affected by the common cold virus?

- a. Golgi complex
- b. secoy vesicle
- c. rough ER
- d. lysosome
- e. ribosome

5. Which of the following structures is not used in eukaryotic protein manufacture and secretion?

- a. microtubules
- b. microfilaments
- c. microfilaments
- d. cilium
- e. centriole vacuoles

4. Which of the following structures does not require an immediate source of energy to function?

- a. both produce proteins that can pass through pores into the nucleus
- b. both contain the same number of copies of tRNA
- c. both use tRNA to assemble amino acids into proteins
- d. both contain a small subunit but only eukaryotes contain a large subunit
- e. prokaryote ribosomes are similar in those
Interpret the data

Which of the following changes in enzyme activity in cells extractable from the nematode worm Caenorhabditis elegans would indicate an increased need for the enzyme activity? (Please mark all that apply)

- Increased activity
- Decreased activity
- No change

10. Which of the following is not a component of the cytoplasm?

- a. cytoplasm
- b. ribosomes
- c. microfilaments
- d. mitochondria
- e. microtubules

11. Which of the following statements about proteins is correct?

- a. Proteins are synthesized in vesicles.
- b. Proteins are synthesized directly in the cytoplasm for secretion from the cell.
- c. Proteins are transported directly into the cytoplasm for secretion from the cell.
- d. Ribosomes are added to proteins by the ribosomes in the cell.
- e. Ribosomes are not present in the rough ER. For use within the cell.

12. Which of the following contribute to the sealed lining of the digestive tract to keep food inside it?

- a. proteins
- b. carbohydrates
- c. lipids
- d. cholesterol
- e. phospholipids

13. Which of the following factors contribute to the sealed lining of the digestive tract to keep food inside it?

- a. secretion of mucus
- b. increase in intestinal motility
- c. decrease in intestinal motility
- d. increased enzyme activity
- e. decreased enzyme activity
The research question: Can we measure the impact of gene expression changes on gene expression changes?

Apply Evolutionary Thinking

What aspects of cell structure suggest that prokaryotes and eukaryotes share a common ancestor in their evolutionary history?

KEY

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<td>1</td>
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<td>7</td>
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</table>

Percent total activity recovered

[Bar chart showing activity levels across different fractions]
1. Тест для определения интенсивности пошады от контактирующих тел с поверхности (ОТП) по 60 шт.
   1. Время: 60 мин.'
From New Scientist, September 8, 2014

Still, some puzzling questions remain about how satellite repeats could have such wide-ranging effects on cellular processes.

The study, which was published in the journal Nature, also highlights the importance of understanding the mechanisms that control cell growth and division. The researchers found that satellite repeats can interact with DNA repair mechanisms, leading to the accumulation of mutations in cells.

In normal cells, the BRCAl protein keeps these regions repressed by binding to a complex of DNA repair proteins, called SCF ubiquitin ligase. This complex targets and degrades the satellite repeat sequences, preventing them from becoming active.

But in cancer cells, there are often large numbers of satellite repeats, which can lead to the activation of these repeat sequences and the formation of tumors.

The researchers hope that their findings will help to shed light on the mechanisms that control cell growth and division, and could lead to new treatments for cancer.

Normal breast cancer gene keeps cancer at bay by blocking DNA repair

The protein encoded by the tumor-suppressing gene BRCAl may keep breast and ovarian cancer in check by preventing transcription of satellite repeats.
3. A比利时国家微生物研究所的测试表明，多菌种的益生菌可显著降低抗生素的耐药性。

2. 哪些是抗生素耐药性的发展方向？

1. 英国和欧洲的专家们对抗生素耐药性表示了担忧。

一周内，由Christopher中心发布的一份报告称，新抗生素的开发已陷入停滞，而抗生素耐药性的问题正在全球范围内蔓延。报告指出，由于抗生素的滥用，许多细菌已经变得对多种抗生素具有耐药性。这使得治疗感染变得更加困难，因为医生们已经失去了许多常用抗生素的有效工具。

Christopher Centre’s report released on July 25, 2017

By Christopher Intelligence

Bacteria Can Be Resistant to Brand-New Antibiotics

3. What was the cause of antibiotic resistance to medicines?

2. Where is antibiotic resistance of Staphylococcus aureus?

1. What are the criteria of Staphylococcus aureus?

2. Antibiotic resistance in many countries is on the rise. This is leading to a growing number of infections that cannot be treated with antibiotics. The World Health Organization has warned that antibiotic resistance is a global health crisis.

3. Antibiotic resistance is a growing threat to public health. It is estimated that by 2050, antibiotic resistance could cause 10 million deaths per year.

1. Antibiotic resistance can be caused by various factors, including the overuse of antibiotics, the presence of antibiotic-resistant bacteria, and the lack of new antibiotics in development.

In their report, the Christopher Centre highlighted the importance of new antibiotics and the need for urgent action to prevent the spread of antibiotic resistance.

Christopher says, “We need to do more to prevent the use of antibiotics in agriculture and veterinary medicine, and to develop new antibiotics that are effective against resistant bacteria.”

The report also called for increased investment in research and development of new antibiotics, as well as better regulation of antibiotic use.

“Antibiotic resistance is a serious threat to global health,” says Christopher. “We cannot afford to ignore it and must act now to prevent the spread of this deadly problem.”

Christopher Intelligence

Scientific American, August 2014, p. 20

Do not allow your imagination to run away with you. The antibiotics are already in use, and they are not going to disappear any time soon.

Christopher Intelligence

Scientific American, August 2014, p. 20

In the meantime, the revolution has begun. We are able to produce a new type of bacteria that can resist antibiotics. This new type of bacteria is powerful and will open a new door to understanding the mechanisms of antibiotic resistance.

Christopher Intelligence

Scientific American, August 2014, p. 20

I believe that this is a great opportunity to learn more about the mechanisms of antibiotic resistance. We need to be able to better understand how antibiotics work and how they affect the bacteria.

Christopher Intelligence

Scientific American, August 2014, p. 20

The development of new antibiotics is a crucial step in the fight against antibiotic resistance. This will require significant investment and collaboration between experts from different fields.

Christopher Intelligence

Scientific American, August 2014, p. 20

I believe that we need to work together to find new solutions to this problem. The future of antibiotic resistance is in our hands.