

**МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ
РОССИЙСКОЙ ФЕДЕРАЦИИ**

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«ЮЖНЫЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»**

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**Учебно-методическое пособие
«A Job for a Biologist»**

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Учебно-методическое пособие разработано проф. кафедры английского языка естественных факультетов О.И. Сафроненко,

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Пояснительная записка

Учебно-методическое пособие “A Job for a Biologist” предназначается для студентов 1-2 курсов биологических специальностей университетов. Его целью является формирование иноязычной коммуникативной компетенции в сфере будущей профессиональной деятельности студентов-биологов, что предполагает успешное овладение английским языком как средством их дальнейшего профессионального развития.

Предлагаемое учебно-методическое пособие ориентировано на создание условий для приобретения студентами опыта использования языковых знаний и умений в различных ситуациях межличностного и профессионального общения; развития творческого подхода к решению профессиональных задач; формирования умений самостоятельной работы; активного использования современных информационных технологий; коллективной познавательной деятельности; самоконтроля и оценки усвоения формируемых навыков и умений.

В пособии вводятся и закрепляются терминологические единицы, характерные для биологических специальностей, развиваются и совершенствуются коммуникативные навыки и стратегии автономного обучения.

Учебно-методическое пособие также содержит приложение, которое включает текстовую основу для прослушивания (script).

Типология используемых в пособии заданий разнообразна и представлена следующими рубриками:

Lead in – включает задания, имеющие своей целью выяснить фоновые знания, мнения, суждения студентов по обсуждаемой тематике.

Reading – предлагает задания на развитие навыков различных видов чтения, извлечение информации, понимание структуры, организации и содержания текста.

Listening – представляет собой аудиозапись монолога профессиональной

направленности и сопровождается заданиями, нацеленными на извлечение конкретной информации, развитие навыков конспектирования, переработки и передачи информации на английском языке.

Focus on language – акцентирует внимание на определенных грамматических аспектах, ключевых словах и словосочетаниях, включает задания на расширение общего и терминологического словарного запаса студентов.

Discuss – предлагает вопросы, позволяющие выявить отношение к прочитанному материалу и соотнести его с собственными знаниями, интересами и опытом.

Get real – предполагает использование умений поиска информации на интернет сайтах и в научно-популярных публикациях в условиях, максимально приближенных к ситуациям реальной учебной деятельности.

Speaking – предлагает задания, направленные на формирование умений диалогического, а также неподготовленного и подготовленного монологического высказывания.

Writing – предлагает различные задания, направленные на развитие умения фиксировать информацию на английском языке с использованием различных форм записи.

Summarizing – имеет своей целью формирование навыков аннотирования научно-популярных русскоязычных текстов на английском языке.

In the Realm of Science – включает дополнительный справочный материал, отражающий специфику естественнонаучных специальностей (общепринятые сокращения, символы и т.д.).

В данное пособие включены также специальные рубрики:

Study help – содержит полезные советы по использованию стратегий изучения английского языка, а также рациональные приемы работы над лексическим и грамматическим материалом и т.д.

Progress Monitoring – представляет собой задание, стимулирующее рефлексивную самооценку процесса изучения английского языка и позволяющее студентам последовательно и адекватно отслеживать свои учебные достижения, успешность продвижения в овладении иностранным языком.

Progress Test – представляет собой тест рубежного контроля, включающий задания на проверку, осмысление и закрепление изученного материала.

Учебно-методическое пособие разработано с использованием аутентичных материалов, основными источниками которых являются британские и американские академические и научно-популярные издания, Интернет, проспекты ведущих университетов англоязычных стран, энциклопедии, словари. При подборе учебных материалов учитывались такие характеристики, как новизна информации, ее познавательность, соответствие учебным и профессиональным потребностям студентов.

Для осуществления самооценки предполагается использование балльно-рейтинговой системы контроля знаний. Пособие включает таблицу итогового контроля, который предполагает полное и правильное выполнение ключевых заданий и теста рубежного. Выполнение заданий рассчитывается в баллах и оценивается по следующей шкале:

- оценка «5» 100-85%
- оценка «4» 84-70%
- оценка «3» 69-50%
- оценка «2» 49% и менее

A JOB FOR A BIOLOGIST

If a job is worth doing, it's worth doing well
Proverb quotes

Learning Objectives:

- revisit vocabulary for describing skills and personal qualities
- revisit patterns with the Infinitive and Gerund
- practice word building
- talk about possible career paths for physics graduates
- write a CV and Cover letter
- build and comment on a diagram of career choices

Lead in

1. An American teenager in his blog comes up with the following questions:



It's about the end of the high school year. I'm going to college. Let's see... What major should I choose? I'm keen on biology but I just can't make up my mind! Any recommendations? OK! Please give your own answers and opinions to some questions below and share your experience in choosing "what to learn" at college. Thank you.

- 1) *What jobs for biologists do you think are the hottest nowadays?*
- 2) *Do you think with a BSc in biology, I can easily get a job with high (or at least, acceptable) salary which can provide me enough money to continue my study? I want to get an MSc and then possibly, a PhD.*
- 3) *Is it actually easy to get a job with major in Zoology? (I'm really interested in wildlife).*

How would you answer these questions? What would you recommend this a high school leaver?

Work in groups. The chart below will help you to brainstorm ideas.

Job	Possible place of work	Advantages
1. <i>wildlife biologist</i>	<i>zoos, aquariums, national parks, museums, veterinary centres, non-profit agencies</i>	<i>in a great demand, well-paid, possibilities of overseas employment, challenging,</i>
2.		
3.		

2. Sum up your ideas and share them with the rest of the class.

Reading

1. Give the Russian equivalent to the phrases on the list. Compare your list with that of your partner. Use a dictionary if necessary.

- daunting prospect
- to be passionate about sth
- a topic of current interest
- to opt to do a Master's degree
- to broaden one's knowledge
- to provide an opportunity
- to pursue academic or research career
- creative profession
- to employ graduates
- work environment
- shortage of skills
- to require a Master's-level qualification
- to remain in touch with the scientific community
- taught/research-based degree
- to make a real impact
- educational techniques

2. Read the text to find out more about possible career paths for biology graduates.

Make notes under these headings.

- Areas of employment
- Skills required
- Degrees/qualifications required

Next Step for Biology Graduates

Leaving university is an exciting but daunting prospect for most students. Everyone knows that with a biology degree on your CV the world is your oyster, but this does not mean that deciding what to do next is easy. There are, quite simply, so many options available. One of the first decisions you need to make is whether to continue studying.



Where next?

In the UK, a Master's degree is a one-year course that can be either taught or research-based. Taught Master's involves producing course work, taking exams and writing a dissertation of 10,000–20,000 words on a topic of current interest in your chosen research field, whereas a research Master's is essentially a miniature PhD. Graduates usually opt to do a Master's because they want to broaden their knowledge by studying a new subject area or because they want to pursue a career, for example in biomedicine, that requires a Master's-level qualification. These courses can be very intensive because you are studying for just a short period of time.

PhDs are in the main undertaken by those thinking of pursuing an academic or research career. When you come to apply for jobs, having a PhD will help you stand out in many private sectors because it shows you can work independently and can master a topic to a very deep level of understanding.

When choosing a PhD, it is important that you pick a research area that you are passionate about because you will be spending the next three years of your life immersed* in your chosen project. So you want to make sure that you will fit in and be comfortable.

Getting out of the classroom

If you decide to join the world of work straight after your first degree, however, you will find yourself in a strong position. As a biology graduate you should have no shortage of skills. As well as being able to work independently and as a part of a group, the chances are that your abilities include excellent problem solving skills, collecting, interpreting and presenting data, communicating clearly both verbally and in writing - skills that are relevant in any work environment.

Where do biology graduates go?

If you enjoy research but want to leave academia behind, then large pharmaceutical and biotechnology companies could be a good option. Not only do these firms spend a lot of money on research and development, they also employ large

numbers of graduates.

With the current focus on climate change and air, water and soil pollution, there are also many job opportunities for biologists in government, environment and pollution control, conservation authorities*, which also have major research and development projects into technologies such as biodegradable devices*, green technologies where biologists have a role to play.

Beyond the lab

If research is not for you but you still want to remain in touch with the scientific community, then you might want to consider science communication, usually in public relations or journalism. These jobs often require a Masters in science communication, although practical skills gained on university newspapers and magazines are also highly regarded. There are also opportunities in publishing for biologists who want to work as publishers or production editors of scientific journals.

Beyond science, biology graduates also often deal with politics and policy working with lawmakers to create new legislation on topics such as biomedical research and environmental protection. Many biologists choose a career in economics, business and industry to study and address the economic impacts of such biological issues as species extinctions and forest protection, to work with drug companies and providers of scientific products and services, to research and test new products. Teaching also provides an opportunity for those with good communication skills to make a real impact. Although becoming a teacher is not for everyone, it can be a very creative profession, in which you can continuously improve your lessons with new material and keep up to date with the latest educational techniques.

A helping hand

These are just a few of the careers available to biology graduates. With the right training you could become anything from a bioinformatics programmer to an epidemiologist or an environmental lawyer. The hardest thing is deciding what you

want to do. But a few hours spent browsing the Internet can uncover a wealth of information about the various industries you might want to consider.

A biology degree stands you in good stead, so make sure that you sell it for what it is actually worth. But whatever you decide to do — make your millions, ensure the planet is safer place or to just take a year out — the most important thing is to make sure you enjoy it.

(Adapted from the Internet sites)

*immersed – погружившись//уйдя с головой

* biodegradable devices – биоразлагающиеся устройства

*conservation authorities – органы охраны окружающей среды

3. Answer the questions.

- a) What are the two types of a Master's degree in the UK universities? What does each type involve?
- b) What are the benefits of taking a PhD course?
- c) Can a graduate with a Bachelor's degree in Biology find an interesting and well-paid job?
- d) What options are available for those who are not very keen on research but want to remain in touch with the scientific community?
- e) What businesses are open for biology graduates?

4. Match the expressions in column **A** with their meanings in column **B**. Translate them into your native language.

- | A | B |
|---------------------------------------|--|
| 1) <i>to stand sb in good stead</i> | a) to be much better or more important than sb/sth |
| 2) <i>to keep up to date</i> | b) used to emphasize that what you are saying is only your own opinion and may not be very helpful |
| 3) <i>to remain in touch with sth</i> | c) to be useful or helpful to sb when needed |
| 4) <i>to stand out</i> | d) to have the most recent information |

- 5) *in the main*
- 6) *for what it's worth*
- 7) *to take a year out*
- 8) *the world is your oyster*

- e) there is no limit to the opportunities open to you
- f) to spend some time away from your usual work or activity in order to rest or do sth else instead
- g) used to say that a statement is true in most cases
- h) to know what is happening in a particular subject or area

Focus on language

1. Complete the chart. Use a dictionary if necessary.

NOUN	VERB	ADJECTIVE
		creative
	decide	
	opt	
		relevant
management		
		industrial
specialist		
	solve	
communication		
	employ	
editor		
		various
	consider	
qualification		

Add new vocabulary to your vocabulary notebook. ✍

Verb patterns with the Infinitive

There are two typical verb patterns with the infinitive:

Verb + Infinitive		Verb + Object + Infinitive	
<i>They decided to pursue a career in science.</i>		<i>PhD helped me to stand out in the company.</i>	
agree	arrange	advise*	allow*
ask*	decide	ask	enable
expect	fail	expect	encourage*
attempt	hope	want	warn
learn*	threaten	force	remind
manage	offer	help	teach
promise	refuse	tell	motivate
remember*	seem	order	persuade
tend	try	invite	recommend*
use	want	forbid	instruct
<i>*when they are followed by question words (who, what, where, how, etc.)</i>		<i>* if followed by an object or in a passive form</i>	

2. Complete the sentences with the most suitable verb from the box. Sometimes more than one verb is possible. Use a dictionary if necessary to check their meanings.

- I strongly _____ you to attend Professor Hazel's lectures on anatomy.
- I'm glad you have _____ to complete our course work before the deadline.
- He _____ to double check the results of the experiment.
- We hope this research will _____ us to explain the mechanism of neurological diseases and mental disorders.
- My parents have always _____ me in my choice of career.
- The new equipment installed in our lab will _____ students to perform their laboratory work with better results.
- Nowadays more and more school leavers _____ to choose biology as their

speciality.

- h) Jill _____ to take a Master's course.
- i) This dispute _____ to split the team into two opposing camps unable to collaborate!
- j) This microscope _____ to make observations at the nanoscale level.

3. Which verbs from the box haven't been used? Include them in the sentences of your own.

Verb patterns with the Infinitive and Gerund				
Some verbs change their meaning followed by the Infinitive or Gerund				
try	need	go on	be sorry	stop
mean	remember	forget	regret	like
Verb + Infinitive			Verb + Gerund	
<i>I'm sorry to interrupt, but can I ask you a question?</i> (= to apologise for a present action)			<i>I'm sorry for making a mistake like that!</i> (apologise for an earlier action)	

4. Study the pairs of sentences. Use a dictionary to explain the difference in meaning. Translate the sentences into your native language.

- 1) a) I **tried to solve** the problem suggested by my supervisor but I couldn't.
(*I made an attempt/effort to do it but I was unsuccessful*)
b) Why don't you **try getting** some more information about this phenomenon?
(*You should do it as an experiment or test*)
- 2) a) I **remember reading** a lot of sci-fi books about cyborgs.
b) Please **remember to follow** the safety instructions while working in the lab.
- 3) a) You've improved a lot, but you still **need to work** harder.
b) I'm afraid my computer **needs upgrading**.

- 4) *a) I stopped to buy* a new issue of the ‘New Scientist’ magazine.
b) They stopped talking and went on with the experiment.
- 5) *a) I like making* experiments, it’s so exciting!
b) I like to make experiments with the help of our lab instructor.
- 6) *a) I will never forget taking* part in the international conference on biophysics in Spain.
b) Don’t forget to aseptinize the lab instrumentation before you start the experiment.
- 7) *a) Although nobody believed it could be possible, he went on experimenting* and made a great discovery.
b) The lecturer stopped talking about the cloning and went on to talk about the recent findings on genetic engineering.
- 8) *a) I didn’t mean to interrupt* you, but how do you explain this formula?
b) Being a researcher often means working overtime.

Verb patterns with Gerund

Verb + Gerund

admit	regret	report	avoid
miss	postpone	suggest	prefer/enjoy/hate
practise	can’t help	finish	consider
mind	recall	resume	imagine
keep (on)	deny	risk	have difficulty (in)
spend (time)	involve	look forward to	mention

E.g. We enjoyed making observation of whales behaviour.

Scientists have reported mapping human genome.

5. Choose the correct form of the verb.

- a) The teacher refused (*accepting/to accept*) the paper.
 b) We arranged (*meeting/to meet*) after the lecture.

- c) Experts are trying (*developing/to develop*) better programs.
- d) Can you imagine (*living/to live*) without cell phones and computers?
- e) I simply can't help (*missing/to miss*) some lectures at university, they are dead-boring.
- f) Would you mind (*testing/to test*) the equipment before using it?
- g) Good communication skills allow scientists and researchers (*getting/to get*) their message across.
- h) Have you finished (*working/to work*) on your project yet?

6. Make sentences of your own with five verbs from the box above.

7. Match the words in **A** with their definitions in **B**.

A	B
1) job	1. <i>a type of job that needs special training or skill, especially one that needs a high level of education</i>
2) career	2. <i>the type of work that someone usually does (especially in official forms)</i>
3) profession	3. <i>the situation in which people work or have jobs, (especially in official documents or news reports)</i>
4) employment	4. <i>the job that sb does, especially in order to earn money, either by working for an employer or working for themselves</i>
5) position	5. <i>type of work that you do for most of your working life, which involves several similar jobs over a long period of time</i>
6) work	6. <i>work for which you receive regular payment, especially when you work for an employer</i>
7) occupation	7. <i>(formal) a job, especially an important one in a large organization</i>

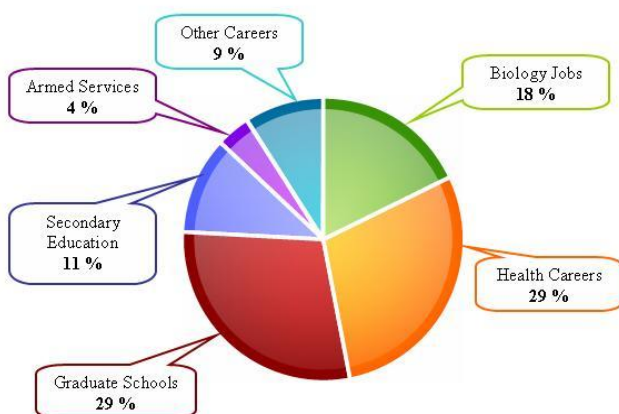
8. Complete the sentences with the words in the box.

work occupation careers employment job position profession

- 1) Only half the people here are in paid
- 2) He hopes to enter the medical after completing his Master's degree course.
- 3) It's very difficult to find at the moment
- 4) She took a as a researcher at the Paterson Institute for Cancer Research.
- 5) Please state your name, age and below.
- 6) I would like to apply for the of a zoo keeper at San Diego Zoo's Wild Animal Park
- 7) Jane wanted to find out more about in Life Sciences.

Speaking

1. The diagram (pie-chart) below illustrates the typical career choices made by Biological Sciences graduates from Missouri University, US. Study this diagram and discuss it as a class. Make use of the **Functional language** box.



This diagram shows that/how many... and compares...

Functional language: *Making comparisons*

...seems to be more/ less *interesting than*

popular
in demand
prestigious
perspective
well-paid
challenging
fascinating
rewarding

most *attractive*
least *exciting*

As can be seen in the diagram/segment...
It is clear from the size of the segment that...

The diagram has six segments:..., ..., ... and ...

The greatest number (percentage) of graduates...
As many as/Far more...
The majority/Fewer/far fewer...

It can be seen that...
This suggests that...
It is interesting to see that...

Get real

Search the Internet to find out about career opportunities for the Biology graduates in Russia. Build a similar pie-chart to illustrate your findings. Present it to the class.

Compare your pie-charts and make comments on them.

Reading

1. Read the advertisement for the job of a statistical-computational biologist/data analyst on page 19. Answer the questions below.
 - a) Is this job suitable for undergraduate students?
 - b) What duties and responsibilities does the job involve?
 - c) What knowledge and skills are required?
 - d) What personal qualities does the employer look for?
 - e) Which areas does the Paterson Institute for Cancer Research work in?
 - f) Where is the company located?
 - g) How could you apply if you got interested in the job?

Statistical-Computational Biologist/Data Analyst

Paterson Institute for Cancer Research is seeking Statistical-Computational Biologist/ Data Analysts for locations in Manchester, UK.

Location:	Paterson Institute for Cancer Research, Manchester, United Kingdom
Interest Area(s):	Bioinformatics, Computational Biology, Molecular Biology
Education Level:	Bachelor's Degree//Master's Degree
Employment Type:	Full Time
Sector:	Industry

Job description:

Paterson Institute for Cancer Research is looking for experienced computational biologists for locations in Manchester, UK to offer a fantastic bioinformatics opportunity available for a bioinformatician/data analyst. The position requires focusing on the statistical analysis of the large-scale experimental data, applying numeric techniques to the modelling and analysis of complex datasets.

Requirements include:

- Bachelor's degree in biological sciences with emphasis in bioinformatics, computational biology, molecular biology, advanced degrees would be beneficial.
- Strong statistical research & development background.
- Solid experience in data analysis and the handling of large-scale genomic data sets
- Ability to work in a small team, to organize and manage a flexible workload.
- Advanced communication skills are desirable.

Contact	Lynda Dallimore
Company Name:	Paterson Institute for Cancer Research
Address:	Manchester, United Kingdom
Phone:	0(161) 446 3231
E-mail:	jobs@picr.man.ac.uk

2. Find in the text a synonym for each group of words given in the list below.
- a) to look for , hunt for , search for
 - b) method, way, skill

- c) site, place, position
- d) extensive, broad, wide-ranging
- e) stress, importance, prominence
- f) highly developed, sophisticated, most modern
- g) arithmetical, mathematical, statistical
- h) to use, employ, exploit
- i) to deal with, control, work with
- j) information, statistics, facts and figures
- k) helpful, useful, valuable

Get real

Search the Internet to find some tips and/or rules on writing a CV. Discuss them as a class and create a Class File on CV writing rules.

Study Help

A Curriculum Vitae, commonly referred to as **CV** (AmE **resume**) is a written record of your education and the jobs you have done, that you send when you are applying for a job. It is a detailed summary not only of your academic backgrounds but also teaching and research experience, publications, presentations, awards, honors and other details.

Writing

1. Write your CV for a job of your choice (say what it is). Use your own personal details, qualifications and work experience which you already have or hope to get in the future. With the partner exchange your CVs and check out if your CVs follow the rules on CV writing.
2. Complete a Cover letter on page 21 to apply for the job of your choice.
3. Work in pairs. Exchange your letters and analyze if the letter of your fellow student provides complete information. Make some suggestions for improvements if necessary.

<p>Your address and the date</p>	<p>6345 Willow Avenue, Baltimore, Maryland, 21220 USA</p> <p style="text-align: right;">4 November 2010</p>
<p>Name and address of the company/person you are writing to</p>	<p><i>Mr. Charles H.C. Smith City Hall Special Projects Officer 19 Harbor Place Baltimore, Maryland 21220 USA</i></p>
<p>Salutation</p> <p>If you know the name of the person, put it: <i>Dear Mrs. Wright Dear Ms. Wright Dear Mr. Wright</i></p> <p>If not, put: <i>Dear Sir(s), Madam</i></p>	<p><i>Dear Sir/Madam,</i></p> <p>I am writing to apply for the position of _____ which was advertised on <i>the Career Search</i> web site on <i>September 7th</i>.</p> <p>I am a student of _____, now in my <i>second year</i> (third semester) at _____ (institution).</p>
<p>The body of the letter</p> <p>Paragraph 1. The introduction</p> <ul style="list-style-type: none"> • <i>reason for writing</i> <p>Paragraph 2. The message</p> <ul style="list-style-type: none"> • <i>education and qualifications</i> <p>Paragraph 3.</p> <ul style="list-style-type: none"> • <i>work experience / present job</i> <p>Paragraph 4.</p> <ul style="list-style-type: none"> • <i>other details (e.g. interests)</i> <p>Paragraph 5.</p> <ul style="list-style-type: none"> • <i>availability for interview</i> <p>If you start: <i>Dear Sir,</i></p> <p>Finish: <i>Yours faithfully</i></p> <p>If you start: <i>Dear Mr Wright</i></p> <p>Finish: <i>Yours sincerely</i></p>	<p>As part of the course of studies all students are required to do <i>an 8-month /a 6-week/</i> work placement. I am very _____ in the job and I think that I have many of the necessary _____.</p> <p>I _____</p> <p>I am good at _____.</p> <p>I have _____ and I have worked as a _____.</p> <p>I am <i>highly motivated, hard-working</i> and _____. I would be very grateful if you could let me know whether there would be a place for me. I would appreciate the opportunity of a new challenge.</p> <p>Please find enclosed my CV and details of my courses. As you can see from my CV, I have <i>a good command of English</i> and <i>a working knowledge of German</i>. I am available for the interview at any time convenient to you and would appreciate the opportunity to discuss a position with you.</p> <p>I look forward to hearing from you soon. Please let me know if you need more information.</p> <p>Yours faithfully,</p> <p style="text-align: right;">(your signature) (your name and surname)</p>

Listening

1. Answer the questions.
 - Have you ever applied for a job? What was the job?
 - Did you get the job? Why? /Why not?
 - Did you have an interview with a Personnel Officer?
 - What questions did you have to answer?
2. Brian Saunders has come for an interview to apply for a job. Listen to the interview and answer the questions.
 - What job is Brian applying for?
 - Does he have any previous experience?
 - Is he likely to get the job? Why? Why not?



Discuss

- Why previous experience is preferable or even important when you are trying to get a new job?
- What would you do if you don't have experience for the job?
- How can you gain necessary experience and skills while you are still a student?
- Are there Career Center Services at your university? How do graduates from your faculty find jobs?

Summarizing

1. Read the text below to find the Russian equivalents to these English word combinations.
 - 1) prestigious job/profession
 - 2) specialists' forecasts
 - 3) to be in the mainstream
 - 4) to be of value/high priority

- 5) to be in demand
- 6) to promise financial support
- 7) to require deep knowledge
- 8) to broaden the range of requirements
- 9) search for means to slow down ageing
- 10) at the frontier of electronics and biotechnologies

Профессии будущего?

Престижность профессий меняется со временем. Какие же специальности окажутся на гребне волны в XXI веке?

По прогнозам специалистов наряду с инженерными специальностями, на лидирующие позиции выйдут специальности на стыке электроники и биотехнологий, использующие биологические системы и их элементы. В настоящее время биотехнологии довольно широко применяются в сельском хозяйстве, где с помощью генной инженерии и методов микробиологии получают генно-модифицированные продукты.

Биотехнологии используются в молекулярной медицине, в биофармацевтических производствах и в других отраслях. Специальности на стыке



электроники и биотехнологий требуют от специалиста глубоких знаний как в электронике, так и в биоинженерии. Вполне вероятно, что рабочие биочипы - дело весьма недалекого будущего.

Все большую важность будут приобретать проблемы сохранения окружающей среды. С одной стороны, начнет повышаться спрос на профессиональных экологов, а с другой - расширяться спектр требований к защитникам природы. Специальность эколога будет требовать знания физики,

химии и биологии, навыков компьютерного моделирования, проходящих в природе процессов. Профессия эколога станет одной из важнейших и самых востребованных профессий.



Также будут востребованы медицинские специальности, связанные с поиском средств продления жизни и все специальности, связанные с нанотехнологиями. Этим отраслям на ближайшее десятилетие обещана

активная поддержка и финансирование.

Конечно же, это далеко не весь список популярных и наиболее востребованных профессий будущего для специалистов-биологов. Так что, может быть стоит задуматься о профессии биостатистика или специалиста-лектора педагога по защите окружающей среды.

Add new vocabulary to your vocabulary notebook. ✍

1. Read the text again and summarize it in English. Make use of the phrases for summarizing in the box.

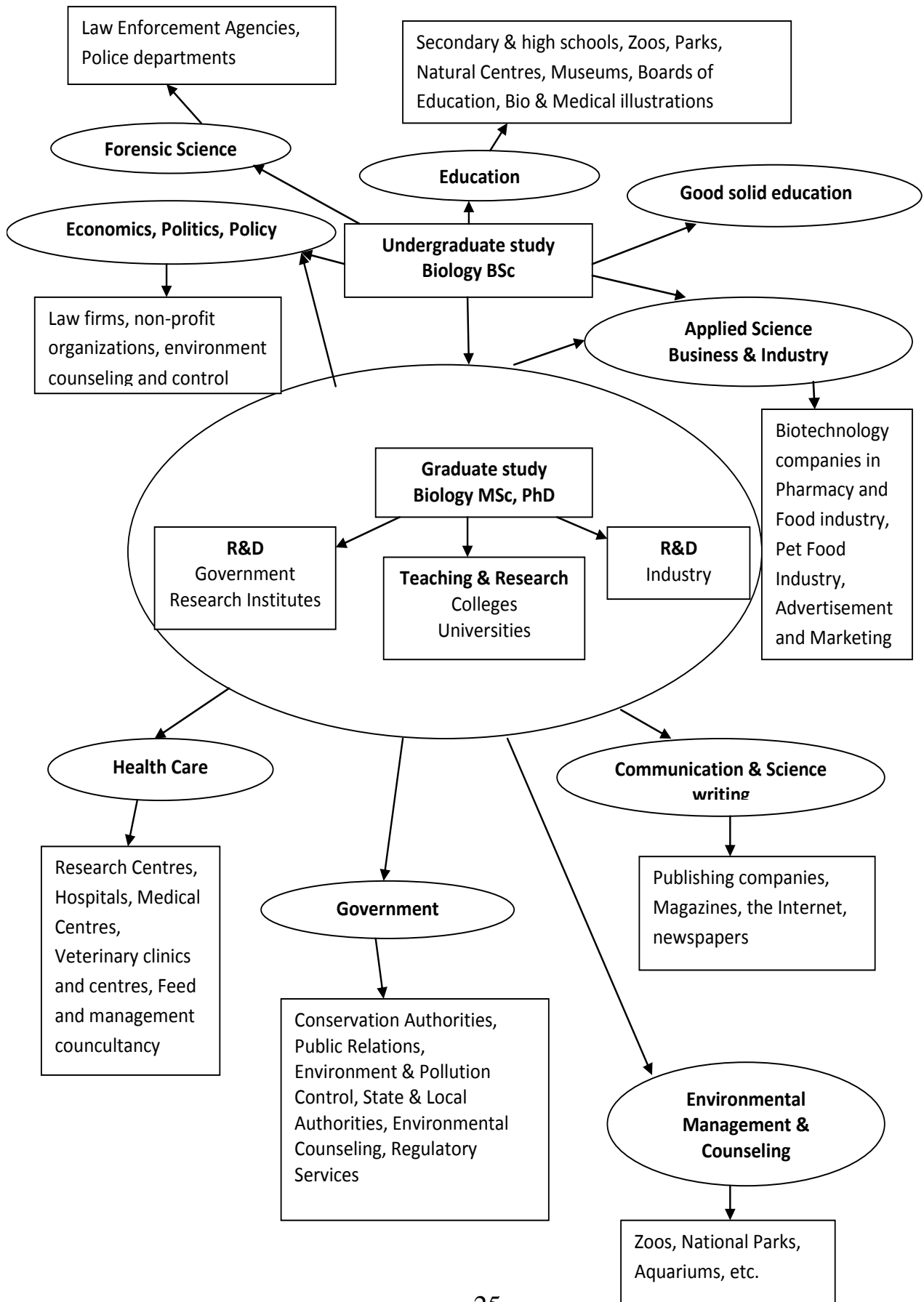
Phrases for summarizing

The article discusses / considers...	The article informs / presents information about...
It is reported /said /stated that...	It is pointed out / claimed that...
Actually; In fact; In particular; For example; Also; Moreover; etc.	

Writing

1. Study the mind-map on page 25 illustrating the employment opportunities for biology graduates. What are the most attractive fields/areas for you?





1. Write an essay of about 250-300 words to describe the employment opportunities for biology graduates. Make use of the model and **Functional language box**.

As can be seen in the diagram, biology offers challenging, exciting and productive careers. To begin with, as a career, biology covers many specialized fields – from botany and marine science to biophysics, ... and ...

Obviously, biology offers a variety of work activities. For instance, you can take a job of vet, researcher, ... as well as ... and ...

Functional language:	Linking words and phrases
<i>Firstly/In the first place/To begin with,...</i>	<i>In fact/Actually...</i>
<i>Secondly/A second area to consider is...</i>	<i>In general/On the whole,...</i>
<i>For instance/For example,...</i>	<i>Clearly/Obviously,....</i>
<i>Another point to remember is...</i>	<i>Alternatively/Another possibility is...</i>
<i>As well as/In addition to/What is more...</i>	<i>Especially/Particularly/Chiefly/Mainly/Mostly</i>
<i>On the one hand/On the other hand...</i>	<i>However,...</i>
<i>Finally,...</i>	<i>Not only...but also...</i>
<i>In conclusion,...</i>	<i>Similarly/In the same way...</i>
<i>Last but not least,...</i>	<i>In other words/That is to say,...</i>
<i>Taking all points into consideration,...</i>	<i>In relation to/Regarding...</i>
	<i>Thus we can see that...</i>

In the Realm of Jobs

1. Below are the lists of verbs and adjectives you might need to speak about your job.

A. To describe your qualities:

- active
- innovative
- adaptable
- loyal
- broad-minded
- motivated

- competent
- creative
- determined
- efficient
- energetic
- enthusiastic
- experienced
- outgoing
- positive
- practical
- reliable
- resourceful
- self disciplined
- tactful

A. To express responsibilities and tasks to be performed:

- to adapt
- to analyze
- to apply
- to arrange
- to assist
- to carry out
- to classify
- to compare
- to complete
- to compute
- to conduct
- to consult
- to control
- to coordinate
- to create
- to edit
- to designate
- to document
- to engineer
- to establish
- to estimate
- to evaluate
- to examine
- to explore
- to facilitate
- to guide
- to head
- to identify
- to implement
- to improve
- to initiate
- to install
- to interpret
- to investigate
- to organize
- to perform
- to plan
- to prepare
- to present
- to programme
- to redesign
- to repair
- to service
- to set up
- to solve
- to sort
- to supervise
- to support
- to systematize
- to test
- to train

- to detect
- to maintain
- to upgrade
- to develop
- to operate
- to verify

Progress Monitoring

You have worked on the vocabulary on the topic “Jobs and career options for biologists”. Tick (V) the points you are confident about and cross (X) the ones you need to revise.

	1) to apply for a job
	2) to find oneself in a strong position
	3) to remain in touch with the scientific community
	4) to require special training/ skills/qualifications/personal qualities
	5) to be a good option
	6) to be well-organized/self- confident/careful/hard-working/active/creative/ responsible
	7) an academic or research career
	8) a high/acceptable salary
	9) employ graduates
	10)to write a CV/Cover letter
	11)problem-solving skills
	12)to have shortage of skills
	13)to work independently/as a part of a group
	14)to remain in touch with the scientific community
	15)to have experience and training in sth
	16)work environment/work placement
	17)job responsibilities/duties
	18)to gain necessary experience and skills
	19)keep up to date with the latest educational techniques
	20)to go for a job interview

Progress Test

1. Cross out the odd word.

- a) job, career, work, academy
- b) course, skills, degree, qualification
- c) prestigious, perspective, popular, responsible
- d) to opt, to apply, to pick, to decide on
- e) well-organized, well-paid, self-confident, hard-working
- f) interview, CV, cover letter, salary

2. Give English equivalents to the following Russian word combinations.

- a) престижная работа/профессия
- b) прогнозы специалистов
- c) быть на гребне волны
- d) пользоваться спросом
- e) на стыке электроники и биотехнологий
- f) устраиваться на работу
- g) превосходить к-л., выделяться
- h) сделать выбор
- i) избрать своей профессией
- j) принимать на работу выпускников университета

3. Write the word and the Russian equivalent next to each transcription.

a) [kə'riə]	career	карьерa
b) [in'hɑ:nsmənt]		
c) [,kwɒlɪfɪ'keɪʃən]		
d) ['prɒspekt]		

e) [, pə:sə'nel 'ofisə]		
f) [kə'rikjuləm 'vi:tai / 'vaitə]		
g) ['reizju:mei]		
h) [ə'veiləbl]		

4. Put the verbs in brackets into the correct *infinitive* or the *-ing* form .

- a) They were trying (*persuade*) him to change his mind.
- b) He regrets (*pretend*) to follow the lab safety instructions.
- c) You seem (know) this formula well. Would you mind (*illustrate*) how it can be applied in these calculations?
- d) I regret (*tell*) you that you have failed (*solve*) this equation.
- e) I wanted (*verify*) the results I got during the experiment.
- f) She decide to arrange (*meet*) with her tutor.
- g) If nothing else works try (*read*) the instructions.
- h) He advised me (*search*) career website for more information on the jobs available with my major.
- i) Working in a team means (*share*) success as well as responsibility if something goes wrong.
- j) He offered (*test*) my model on a more powerful computer.

Credit Points

Tasks	Get real	Writing	Summarizing	Writing	Progress test	Total
Maximum score	10	10	10	10	33	73
Your scores						
%						

Script

Job interview

P.O. - Good morning, Mr. Saunders. My name's Lucy Norris. Please take a seat.

B – Pleased to meet you, Ms Norris.

P.O. - You've applied for a job as a Laboratory Assistant, right?

B. – Yes, that's correct.

P.O. –And what experience do you have in this area?

B – Well, I worked part-time in a biochemistry lab for one year.

P.O. – All right. What were your duties?

B – Well, I had to maintain laboratory equipment and prepare the reagents and equipment for experiments. I also assisted the lab instructor.

P.O. – Did you like the job?

B - Yes, very much. Actually, I've always enjoyed research and I hope that this position would offer me an opportunity to extend my skills in this area.

P.O. – OK. And how would you describe your personality?

B. - I suppose, I'm highly motivated, hard-working and very well organized. Also, I enjoy working in a team.

P.O. – OK, that's good. By the way, what were your favourite subjects as a student?

B. – Favourite subjects? ... Actually, I liked several, um,... Microbiology, Molecular Biology, Human Biology, Chemistry, Computer Science. I also enjoyed History.

P.O - Do you have any plans for further study?

B. - Well, I've thought about taking a course in Biochemistry and getting a Master's degree. I am also interested in research writing. I think I would really benefit from doing that.

P.O – Well, sounds great! If you attend an institution to further your research skills, our company could recommend you for a better and higher-paid position after you get the degree. How would you feel about this?

B. - If the course made me a more effective and capable employee, then I would definitely do it.

P.O - Now, do you have any questions you'd like to ask me about the position?

B. - Yes. Ms Norris. If I got the job what would be my working hours?

P.O – Well, we'd need you four days a week from 9 a.m. to 2 p.m. Would that suit you?

B. – Yes, that's fine with me. So, what would the salary be?

P.O – You'd start with £25 per hour, but we'd review your salary and performance every six months. Well, I think I've asked you everything I wanted to. Thank you for your time. You should hear from us within the next week.

B. – Thank you very much, Ms Norris.

Reference materials

1. WiseGEEK website. Retrieved from <http://www.wisegeek.com/science.htm>
2. Careers in the Biological Sciences//American Institute of Biological Sciences. Retrieved from <http://www.aibs.org/careers/>

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Internet resources

1. Wikipedia The free online encyclopedia <http://en.wikipedia.org/wiki/>
2. Careers in Life Science. APS Education Online <http://www.the-aps.org/education/k-12misc/careers.htm>
3. Prospects: The UK's official graduate careers website http://www.prospects.ac.uk/options_biology_career_areas.htm