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Настоящие методические рекомендации составлены в соответствии с Программой-минимумом экзамена по общенаучной дисциплине «Иностранный язык» и предназначены аспирантам и соискателям. Основной целью рекомендаций является совершенствование и дальнейшее развитие полученных в высшей школе знаний, навыков и умений аспирантов (соискателей) по английскому языку в различных видах речевой коммуникации.

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Под общей редакцией канд. филол. наук, доц. Г.А. Агеевой

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Jobs and Professions

He who has an art has everywhere a part

1. Say as many words denoting professions as you can.
2. Look through the list of words and say what words you do not know. Those who know them explain their meaning in English using the model:
 - What does *a cashier* mean? / What does a cashier do?
 - *A cashier* is a person who receives and pays out money in a bank, store, etc.

scientist	researcher	mathematician
geologist	programmer	electrician
chemist	geographer	politician
meteorologist	engineer	cybernetician
biologist	power engineer	musician
economist	teacher	physician
cyberneticist	lawyer	salesman/woman
psychologist	driver	railwayman/person
psychiatrist	book-keeper	cameraman
ichthyologist	waiter	policeman
journalist	cashier	businessman
dentist	farmer	doctor
	carpenter	tailor

3. Can you derive the rule how to form the nouns denoting professions?
What suffixes are used? Do you agree with the model?

V+er/or = N (profession)
 N+ er/ist = N
 N+cian = N

4. Complete the chart. Add the science that you deal with (if there is no one) and two derivatives to it. Practice saying them.

Abstract noun	Personal noun	Adjective
science	scientist	scientific
research	researcher	research
physics	physicist	physical
chemistry		
mathematics		
biology		
geography		
geology		

Abstract noun	Personal noun	Adjective
programming		
genetics		
meteorology		
seismology		
engineering		

5. Read the sentences and find synonyms for the word “study”.

- 1) Entomology deals with all kinds of insects.
- 2) Professor X investigates the problems of quantum physics.
- 3) Traditionally chemists were concerned with measuring the properties of matter.
- 4) Many scientists are concerned with this phenomenon.
- 5) The scientists of our Institute are engaged in different research areas.
- 6) My supervisor is busy with the problems of thermodynamics.
- 7) What is he busy with at the moment?
- 8) The Institute of the Earth Crust is engaged in the problems of seismicity, groundwater resources and geocology.
- 9) Astronomy deals with celestial bodies.

6. Practise orally in using the names of specialties and sciences.

Use the model: I am a biologist.

I deal with/am concerned with/ problems of genetics.

7. Fill in with the words in brackets.

- 1) A _____ studies properties of matter and energy and interactions between them, whereas a _____ examines people who are ill, prescribes medicine and treat them. (physician/physicist)
- 2) An _____ is a scientist who studies the stars and planets, but an _____ makes predictions by studying the positions of stars and planets. (astrologer/ astronomer)
- 3) A _____ informs people about the weather on the TV or radio, whereas a _____ studies weather conditions so that the weather forecast can be given. (weather presenter/ meteorologist)
- 4) A(n) _____ is responsible for the preparation and publication of a newspaper, book or magazine, while a(n) _____ prints them ready to be sold. (publisher/editor)

- 5) _____ works in places from which you can buy books, whereas _____ works in places from which you can borrow books. (librarian/shop-assistant)
- 6) A(n) _____ repairs car engines, whereas a(n) _____ uses scientific knowledge to develop machines. (mechanic/engineer)
- 7) A _____ deals with mental and emotional disorders while a _____ is a person trained and educated to perform psychological research, testing and therapy. (psychologist/psychiatrist)
- 8) A _____ studies the laws that regulate the universe and underlie all knowledge and reality whereas a _____ studies literature and languages. (philologist/philosopher)

8. Say what a doctor, an accountant, a politician, a policeman, a typist, a farmer do using the above exercise as a model.

9. Think of a profession. Describe what a person of this profession does. Other students should guess the profession you thought.

10. Describe your own job in the same way.

11. How many hours a day do you work? Say what sort of work you do on a typical day. The following words may help you:

to carry out/ conduct/perform an experiment

to make programs

to model smth

to read literature

to collect data

to analyze smth

to take measurements

to test smth by experiment

12. Work in pairs. Ask your partner the questions and then tell the class about him/her:

1) What do you enjoy most (hate most) about your job?

2) Is it a good idea to change jobs frequently?

3) What was your dream in the childhood? (What were you going to become?)

Did your dream come true?

Job Suitability

Every man has its price

1. Read the words expressing qualities needed for some jobs. Can you add any more?

Reliable	- надежный
Patient	- терпеливый
Competent	- квалифицированный
Well-organized	- хорошо организованный
Attractive	- красивый, привлекательный
Creative	- творческий
Kind	- добрый
Intelligent	- умный
Friendly	- дружелюбный
Hard working	- трудолюбивый, усердный
Diplomatic	- дипломатичный
Relaxed	- ненапряженный, расслабленный
Humorous	- обладающий чувством юмора
Logical	- рациональный, разумный
Ambitious	- честолюбивый
Dedicated	- преданный
Talented	- талантливый
Persuasive	- убедительный
Brave	- храбрый
Energetic	- энергичный, сильный, деятельный
Polite	вежливый
Fair	- справедливый
Sociable	- общительный
Persistent	- настойчивый, упорный
Eloquent	- красноречивый

2. In pairs, choose 3-4 adjectives from the list to describe the qualities most needed for each of the jobs below.

- 1). A politician has to be
- 2). A doctor....
- 3). A librarian
- 4). A model...
- 5). A ski-instructor....
- 6). A firefighter...
- 7). A judge ...

3. A tape from "Blueprint" 2, Brian Abbs and Ingrid Freebairn, Unit 7, ex.8.

Listen to a manager and note which qualities he thinks are important in a personal assistant.

4. A tape from "Language Passport". Preparing for the IELTS interview. Carolyn Catt

a) Listen to the tape and say what the girl is speaking about.

b) Listen to the tape again and write down the reasons why the speaker believes she could become a good hotel receptionist. Which reasons that she gives are personal qualities and which are qualifications or skills?

c) Listen again and write down the expressions that she uses to give her opinions.

5. Say what qualities are very important in your job.

Which qualities do you think you have? Use the *opinion expressions* you have written down from the task above.

6. Look at the "Job Suitability Questionnaire". Can you add some more questions in each section?

PERSONALITY

Are you: interested in people?
energetic?
ambitious?
patient?

.....

ABILITIES AND SKILLS

Have you got: a good memory?
a sense of humour?

.....

Are you: artistic?
practical?
logical?
good at organizing?

.....

Can you: drive?
speak any foreign languages?

.....

PREFERENCES

Do you like: working on your own?
taking responsibilities?

.....

Do you mind: working long hours?
getting up early?
noise?

.....

Would you rather: work indoors or outdoors?
work in a big organization or a small one?

.....

.....

How important are these things to you?

(extremely/very/quite/ not very/ not at all)

a good salary

comfortable working conditions

a chance of promotion

.....

7. Work with another student. Ask him/her the questions on the questionnaire. Note his/her answers. Use expressions:

Sorry, what did you say?

What do you mean?

Could you speak more slowly?

2. Try to suggest a suitable job for your partner.

Use expressions: I think Ivan would be a good bus-driver.

Ann has the personality to be a lawyer.

Sergei would do well as a waiter.

Nastya could do anything.

Ideal Job: Is It Possible?

A bird in the hand is worth two in the bush

1. Read the phrases and find out their meaning. Practise saying them.
2. These things may be important for people in their jobs.

Can you add other things of importance?

- a good salary
- good relations with colleagues
- good canteen/cafeteria
- variety in the work done
- contact with the public
- little work to do
- flexible hours
- long holidays
- proximity to place of residence
- travelling
- social activities at one's place of work (dinner dances, excursions, picnics, etc.)
- chance of promotion
- a pleasant and attractive place of work
- a clean and well-heated place of work
- the prestige of the company
- any numbers of the opposite sex working there should be attractive
- perks (company car, cheap loans, large discounts on company products)
- a feeling of making the world better place to live in
- a smoke-free work area
- opportunities for continuing education
- an opportunity to initiate new products
- close supervision over you
- little or no supervision over you
- a tight organizational structure with a well-defined hierarchy
- loose organizational structure
- a democratic decision-making process
- lots of responsibility
- security
- a feeling of being useful
- the opportunity to command other people
- a convenient place to park

1. What job would be ideal for you? What thing of importance would it combine?
3. Choose 4-5 most important and one least important things for you in a job. Say why.

Use phrases expressing **opinion**: I think (that)....

I consider (that)...

I believe (that)...

In my opinion.../To my mind...

It seems to me that...

4. Take a card where some jobs are written (a musician, a pilot, a politician, etc.) and say if you would like or hate to do it. Say why, reasoning from the choice you have just made. Use conversational formulas expressing likes and dislikes:

Model: I **enjoy** traveling that is why ...

I can say that I am very sociable and **like** speaking to people so the profession of a journalist **appeals** to me.

I can hardly say that I am a public person. In fact I **hate** making speeches so...

I **like** variety in the work that is why I **dislike** the idea of being a.....

I **am not interested in** + Ving/ N

5. Write one or two things you like and one or two things you do not like about your present job or activity.
6. Read and translate these sayings about money and work. Do you agree? Why? Remember the conversational formulas to express agreement and disagreement.

I'm opposed to millionaires, but it would be dangerous to offer me the position.

Money may not bring happiness, but it is nice to find out for yourself.

Money talks and it's nearly always saying 'Goodbye'

The Ten Worst Jobs

The devil is not as black as he is painted

1. Answer the question before you read the text: what jobs may be considered as bad jobs and why in your opinion?
2. Read italicized words and commentary to them:
 - toll – payment required for the use of a road, bridge, harbour, etc.
 - pool typist – a typist who works with a group of other typists under supervision
 - bogus – not real, not genuine
 - typesetter – a person who sets types for printing
 - computer tape librarian – someone who winds and removes computer tapes after use
 - automatic-elevator operator – a person who operates an automatic elevator (Br. lift)
 - meaningful – significant
 - frustrate – prevent a person from doing something; make useless
3. Read the text and say if it was easy for Roy Walter to choose the listed jobs. Why?

The Ten Worst Jobs

Roy Walter, a private consultant, lists the following jobs as the “Ten Worst Jobs in America”:

- Assembly-line worker
- Highway *toll* collector
- Car-watcher in a tunnel
- *Pool typist*
- Bank guard
- Copy-machine operator
- *Bogus typesetter*
- *Computer tape librarian*
- Housewife (not to be confused with ‘mother’)
- *Automatic-elevator operator*

While readers may disagree with some of these choices, they were not made lightly. For instance, Walter put housewife on the list not just to be provocative but because he is firmly convinced that that job is ‘one of the worst, most boring, unrewarding and unrewarded’ that has ever been created.

What makes these jobs the worst in Walters’ opinion is that they do not have any opportunities for *meaningful* self-development, and most opportunities for meaningful interaction with other human beings. In short, the jobs *frustrate* the worker’s need to maintain his self-respect and win the respect of others.

4. Answer the questions:

- 1) Do you agree with any of the choices?
- 2) Would you add any jobs to the list and why?
- 3) Suggest some reasons why each job is bad.
- 4) Do you have any ideas how to make these jobs more meaningful and personally satisfying for the worker?

5. Work in pairs. Discuss the following questions:

- 1). Are there any jobs which give opportunities for 'meaningful self-development'?
- 2). If you could have any job anywhere in the world what would you choose and why?

Use models:

If I could have any job I would choose the job of a..... because....

If I could choose I would be a because....

If I could choose a country where I could work I would choose....

- 3). Are the studies you are now undertaking a direct preparation for a job? If not, how do you justify doing them?

2. Read the quotation and say if you agree with it.

“ Few tasks are more like the torture of Sisyphus than housework, with its endless repetition... The housewife wears herself making time; she makes nothing, simply perpetuates the present” Simone de Beauvoir (French novelist and feminist)

The Start of the Scientific Career

If you don't like the heat get out of the kitchen

1. Think and say if there are any advantages and disadvantages (pros and cons) of taking a post graduate course. What are they in your opinion?
2. Read the first paragraph of the text and identify the sentence which serves as an introduction to the text.
3. Look through the text and say about making what decision is spoken about.
4. Look though the text and copy out all the words followed by Ving form (gerund).
Translate these words (if you don't know the translations look up pp.31-33 of the book "Learn to Read Science" by Shakhova, Moscow,"Nauka" 1993.
5. Read the text and say what a true scientist is in the author's opinion?

Making a decision on a career is not easy. Every university graduate is faced with it. There are many opportunities that are worth trying, and one of them is doing science.

The idea of taking up a post graduate course is certainly very appealing and no graduate can help being tempted by it. But not everyone is capable of withstanding all the difficulties involved in doing research. If you intend to become a post-graduate, you are advised to weigh all pros and cons, to look close into advantages and disadvantages of the scientific career.

It is no use asking for other people's advice in this matter. Tastes differ, and one man's meat is sometimes another man's poison. Remember the English saying: So many men, so many minds. Hence avoid consulting other people and try to make up your mind.

You should realize there are many aspects of the problem. First of all, you should be absolutely sure that you will make a dedicated researcher, that you will give all your time and efforts to studying.

Then you must ask yourself if you are capable of doing scientific work, if you are interested enough in doing research to be ready to sacrifice all pleasures of life for science. It is the disadvantages of the work that you should consider first. They are numerous. And it is no good deceiving yourself that they do not matter. They do. And very much so.

Try to analyze where your interests lie, make sure you will enjoy dedicating your life to science. Your work will prevent you from visiting friends, from going out, from playing with your children, from seeing relatives.

Moreover, your wife might (unless she is also a scientist) misunderstand your infatuation for work and take it for something else. She may start being jealous and unhappy, she might wish you would stop staying up at night, coming home late or not at all, wasting (as she would put it) your time, making all those numerous and pointless experiments of yours. In fact she might wish you gave up doing science and took up some other trade or profession.

If you are a true scientist and enjoy working and living like that, if you do not mind sacrificing your life for science, if your work means everything to you, you will

not give it up, you will carry on doggedly doing your job, you will succeed in finding the solution you have been searching for all this time.

When that day comes, you will be the happiest man on the Earth till you recognize another urgent problem awaiting its solution.

Whatever happens, you will never regret having chosen the career of a scientist. You will keep on saying to your folks at home and to your friends: "It was worthwhile making all the efforts". But... There is always a but. The day of success may never come and you might be disappointed.

Now is the time for making a decision, for making up your mind, for thinking it over. Once you have started, you must keep going, never resting, never satisfied with yourself, always busy, worried and very often tired.

And still I am saying this: "It is worthwhile trying." What do you think?

6. Answer the following questions:

- 1) Why does the idea of taking a post graduate course seem very appealing and inviting?
- 2) Did you weigh all pros and cons before taking a post graduate course?
- 3) Did you ask for your friends or parents advice?
- 4) If you had a child would you advice him to choose a career of a scientist?
- 5) Why is not it possible to combine science and all pleasures of life in the author's opinion? Do you agree with it?
- 6) Are you married? Would you like your wife/husband to be a scientist?
- 7) Write an abstract of the text in several sentences.
- 8) Comment on the following quotation:

"If I were a young man again and had to decide how to make my living, I would not try to become a scientist or scholar or teacher. I'd rather choose to be a plumber or peddler in the hope to find that modest degree of independence still available under present circumstances."

Albert Einstein

7. Paraphrase the following quotations:

"Success usually comes to those who are too busy to be looking for it."

Henry David Thoreau (American philosopher)

"You always pass failure on the way to success"

Mickey Rooney (American comedian)

"Minds are like parachutes. They only function when they are open"

James Dewar (Scottish physicist)

"The only limit to our realization of tomorrow will be our doubts of today"

Franklin D. Roosevelt

Young Professionals

Better be an old cow than a cow of a new kind

1. The text you are to read is about yuppies. Yuppie is an acronym. Acronym is a word formed by the initial letters of a name, for example :

NASA - National Aeronautics and Space Administration (Национальное агентство по авиации и исследованию космического пространства, НАСА)

UNESCO -United Nations Educational, Scientific and Cultural Organization (Организация ООН по вопросам образования, науки и культуры, ЮНЕСКО)

NATO - North Atlantic Treaty Organization, НАТО (Североатлантический союз, НАТО)

Can you give any other examples of acronyms?

Yuppie - young urban professional (another version: young upwardly mobile professional person).

2. Have you ever heard of yuppies? What do you know about them? Read the text and say if you agree with the definition of yuppies: it is a socio-economic demographic group of young people who are selfish, materialistic, and psychologically superficial people with a big income.

Yuppies: Who They Are

Although the term “yuppie” is basically an invention of the mass media, yuppies do indeed exist. Yet they are not as uniform and united as it is claimed. On the one hand, yuppies are a result of the reaction against the *antiestablishment*, against the *free-minded* 60s’ generation. But on the other hand, they are a phenomenon much more complex, tied to the nation’s economy.

What is a yuppie? He/she is Young Urban Professional working toward a career in business, advertising, or high finance, willing to sacrifice free time, creativity, and even political integrity in order to become successful. Financial security and social prestige are his ultimate goals. Being a yuppie is a way of life. Those who want to be yuppie have already adopted the yuppie value system. It consists of a respect for the establishment, a belief that money cures all ills, a desire to live in a posh apartment or a fancy house. They are bent on success and very materialistic. They pursue power and money.

Yuppies are **Young**: generally in their late twenties or thirties, usually married without children because husband and wife are yuppies, and don’t have time for children. (Yuppies usually marry yuppies. Yuppie-men rarely marry housewives).

Yuppies are **Urban**, and often despise the mediocre suburban life-style, believing that they have risen above middle-American values. They are very cosmopolitan: they decorate their homes with Picasso and show their faces at the most talked-about exhibitions at the Metropolitan Museum of Art and the Museum of Modern Art in New York, and profess a love for classical music. When they have time to read or to appreciate their \$100,000 paintings is a mystery they themselves can’t answer. But

they like to discuss art although they know absolutely nothing about it. They like to spend Christmas in Paris “experiencing France”. Yet they don’t speak French and understand nothing of French culture.

Most of all, yuppies are **Professional**: they can be seen setting off to work every day in the most elegant business suits and dresses. They work hard, rise quickly, and stop at nothing.

Don’t confuse “Yuppies” with “Americans”: to most American intellectuals “Yuppie” has a negative connotation.

3. Read the text again. Can you guess the meaning of the underlined words from the context? Translate the sentences with underlined words into Russian.

4. Match a prefix and a suffix with their meaning :

- | | |
|-----------|--------------------------------------|
| 1. anti- | A. having the kind of mind mentioned |
| 2. minded | B. opposed to, against |

Find in the text the words with these world-building parts and translate them. Give Russian equivalents to the words: antiseptic, antisocial, antihero, healthy-minded, noble-minded, research-minded, travel-minded.

5. Read the text again and answer the questions:

- 1) Where did the term “yuppie” come from?
- 2) How old are yuppies?
- 3) Where do they live?
- 4) Where do they work?
- 5) What is their value system?
- 6) Do they have families? Who are their wives/husbands?
- 7) What life style is characteristic of yuppies?
- 8) Are they interested in art?
- 9) Are they travel-minded?
- 10) What adjectives would you use to characterize them?
- 11) Is there a sort of yuppies in Russia?
- 12) Why does the term “yuppie” have negative connotation for most American intellectuals?

6. Compare two sentences taken from the two texts above:

“Yuppies sacrifice free time and creativity in order to become successful”.

“A true scientist is ready to sacrifice all pleasures of life for science”.

Can we say that these social groups have something in common?

Why/Why not?

Can you prove your point of view? Will you discuss this topic using

“cardversations (cards with phrases like: “The first thing is..”,

“I think that...”, “I am quite sure that...”, “I disagree, because...”, “May be, but I still think..”, “But to take example of..”, “I agree, because...”, “To go back to...”, “The main point is...”, etc.)

7. Check how right you are at guessing the meaning of the words from the context.

superficial (adj.) – not deep, shallow

posh (adj.) –superb, excellent, chic, smart

fancy (adj.) – special, deluxe, not plain, not simple

pursue (v.)– follow, chase, track

mediocre (adj.) – ordinary, dull

profess (v.) – confess, acknowledge, claim

set off (v.) – start out, embark

connotation (n) – implication, meaning

1. Before reading the whole texts, read the title and say what the text is about, in your opinion.
2. Read the text and say if the author worked days and nights when he was a post-graduate?

All Work and No Play

Finding a balance between work, play, and other activities isn't easy. Different people will give you very different advice. Some people say you should be spending eighty or ninety percent of your waking hours working on your thesis. Others think that this is unrealistic and unhealthy, and that it's important for your mental and physical health to have other active interests.

If you have a family, you will have to balance your priorities even more carefully. Graduate school isn't worth risking your personal relationships; be sure that you save time and energy to focus on the people who matter to you.

One of the keys to balancing your life is to develop a schedule that's more or less consistent. You may decide that you will only work during the days, and that evenings are for your hobbies. Or you might decide that afternoons are for socializing and exercising, and work late at night. I decided very early on in graduate school that weekends were for me, not for my thesis, and I think it helped me to stay sane.

Many postgraduate students feel depressed around the end of the second or beginning of the third year, when they're finishing up their coursework and trying to focus in on a thesis topic. Sometimes this process can take quite a while. Try to find useful, enjoyable activities that can take your mind off the thesis. Sing in a choir, learn a foreign language, study the history of ancient Greece, garden, or knit. If you schedule regular activities (rehearsals, tennis lessons), you will probably find it easier to avoid drifting aimlessly from day to day.

In the final push to finish your thesis, though, you will almost certainly have less time for social activities than you used to. Your friends may start to make you feel guilty, whether they intend to or not. Warn them in advance that you expect to turn down lots of invitations, and it's nothing personal - but you need to focus on your thesis for a while. After defending your thesis you'll be free as a bird! Until the next phase of your life starts...

3. Read the text again and answer the questions:

- 1) What other title can be given to the text?
- 2) Do you know the end of the proverb: "All work and no play?"
- 3) Can you comment on it?
- 4) Is it easy to find a balance between research work, play and other activities?
What do some people advise to do?
- 5) What does the author recommend? Do you agree with him?

- 6) How do you allocate your time between your work and other activities?
- 7) What do you do when you feel stress?
- 8) What are some common ways of relieving stress?

4. Make a dialogue using the scheme given below.

Postgraduate A.

You have noticed that your friend B doesn't look very well.

Find out what the matter is.

Postgraduate B

You are feeling very tired. You can't sleep at night. You are working on your thesis very hard. You stay overtime and take work to home. You actually work until midnight and drink a lot of coffee. You do not have days off.

Postgraduate student A

Postgraduate student B

Tell postgraduate student B he/she does not look very well and ask what the matter is.

Say you are tired. Say why.

Ask what time B goes to bed.

Say when you go to bed.

Give advice. Ask what B usually drinks in the evening.

Say what you drink in the evening.

Give advice. Ask if B ever does any exercises.

Say what exercises you do.

Give advice.

Thank A and say you'll try to do what he/she says.

4. Comment on the quotation:

“It is impossible to enjoy idling thoroughly unless one has plenty of work to do”.
Jerome K. Jerome

The Nobel Prize

Work has bitter root but sweet fruit

1. Read the words after a teacher and remember their pronunciations and meanings:
Alfred Nobel, the Nobel Prize, dynamite (n), explosive (n, adj.), laureate (n), fortune (n), to make a fortune, will (n, v), income (n), anniversary (n), committee (n), elite (n), Scandinavia, Sweden, Swedish, Norway, Norwegian, Stockholm, Oslo
2. What do you know about the Nobel Prize? Who is it named after?
3. Read the text and found out :
 - 1) Who was the creator of the prizes? What did he invent?
 - 2) When did he die? What was his will?
 - 3) Scientists from what fields of science can become laureates of the Nobel Prize?
 - 4) Where and when do the ceremonies of presentation of gold medals take place?
 - 5) Who is responsible for investigating, debating and nominating scientists for the prize?

The Nobel Prize

The prizes were created by Alfred Nobel, 19th-century Swedish inventor who made a fortune from developing dynamite and other explosives. Nobel, when he died in 1896, willed that the income from most of his fortune should be “annually distributed in the form of prizes to those who, during the preceding year, have conferred the greatest benefit on mankind”. In glittering ceremonies at Stockholm’s Concert Hall, the King of Sweden himself presents gold medals and diplomas to the laureates in physics, chemistry, literature, and medicine or physiology. On the same day, the anniversary of Nobel’s death, the Norwegians make their presentation in Oslo to the winner of the peace prize.

Hundreds of nominations, submitted from six continents, are investigated and debated by the prize selection committees, which represent the intellectual elite of Scandinavia. The Storting, the Norwegian Parliament, names the five members Peace Prize Committee. In both physics and chemistry, the prize is decided by Sweden’s Royal Academy of Sciences; in medicine and physiology, by the faculty of the Caroline Institute, Stockholm’s world known Swedish Academy.

4. What Nobel Laureates from Russia do you know? What are they famous as?
5. What Nobel Laureates in your field of research do you know? What are they famous for?

- 6.** Listen to the tape about the Nobel laureates (English Platinum, # 128) and say their names. What are they noted for?
- 7.** Repeat after the teacher the words from the text and try to guess their meaning from the context: co-discovery (n.), DNA (deoxyribonucleic acid), offspring (n.), carbon containing molecule, living cell, properties of organic molecules, shape (n.v.), a double helix or spiral ladder, break through (n.), share (v.)
If you can't guess, look up a dictionary.
- 8.** Listen to the text again, repeat every sentence in pauses and translate.
- 9.** Shadow the text:

English biologist Francis Crick is noted for his co-discovery of the structure of DNA (deoxyribonucleic acid), the means by which characteristics are passed on from parents to offspring. His colleague was the American biologist James Watson (b.1928). DNA is a complex organic (carbon containing) molecule present in every living cell. Crick started researching the properties of organic molecules in 1947. In 1953 he and Watson discovered that the DNA molecule is probably shaped like a double helix, or spiral ladder. This was the major breakthrough in our understanding of genetics. Crick and Watson shared the 1962 Nobel Prize for medicine and physiology.

- 10.** Tell your partner what you know about Francis Crick discovery.
- 11.** Do you agree with what Francis Crick said:

Your joys and your sorrows, your memories and ambitions, your sense of personal identity and free will are in fact no more than the behaviour of a vast assembly of nerve cells and their associated molecules.

- 12.** Find information about a Nobel laureate in your field of research in literature or the Internet and be ready to share it with other students the next lesson.

How American Science is Organized

1. Study the words and make up sentences with them.

to operate centralized science and technology policy – проводить централизованную научную и технологическую политику

to maintain a system of government and national laboratories – поддерживать систему правительственных и национальных лабораторий

to do basic(applied) research – заниматься фундаментальным (прикладным) исследованием

to budget mission-oriented programs – финансировать целевые программы

to sponsor research – финансировать исследование

to do research through a contract system – проводить исследование по контрактной системе

cooperative [cou'operativ] university-industry research - совместное исследование, проводимое университетом и промышленной компанией

to encourage joint (cooperative) university-industry programs – поддерживать совместные программы, проводимые университетом и промышленной компанией

joint ventures – совместные предприятия

loss of academic freedom – потеря научной свободы

infringement on academic freedom - посягательство на научную свободу

private (firms, universities, corporations, etc.) - частный

rival (firms) – adj. конкурирующий, соперничающий; n. соперник, конкурент

practical application – практическое применение

economic benefit – экономическая выгода

to pool – объединить в общий фонд, складываться

campus – территория университета

foster – поощрять, стимулировать, одобрять

2. Read the text and say who the major sponsor of science in the USA is.

How American Science is Organized

The United States does not operate a centralized science and technology policy. There is no central planning. But it does not mean that there is no monitoring of science and technology because there is. The US scientific establishments are series of pragmatic responses to society's specific needs.

The Federal government sponsors the major part of country's research. It's done through contract systems. The government supports about three-fourths of all scientific research carried on in universities. Take Cal Tech, for instance. It's a private university and gets the major part of its budget from Federal grants and contracts. Besides, the government maintains a large system of its own government laboratories run by government workers, and national laboratories run by outsiders. Many of them depend on universities as a source of permanent research personal, and on government policy for guidance of their research programs. These are the Oak

Ridge National Laboratory, the National Research Laboratory or the Brookhaven National Laboratory. These government and national laboratories are concerned with basic research. National laboratories are usually mission-oriented. For example, Brookhaven's interests are physics, biology and chemistry.

There are also private industrial firms that carry on research. Though some excellent basic work is done in industry, the amount of basic research that private corporations can be expected to carry out is limited, because only a few of them can support fundamental science on a significant scale. There is no knowing when basic research will result in practical application. Besides there is always a good chance that the economic benefits of the research may be captured by a rival firm or by another industry.

It is becoming very common for industrial firms to sponsor research done through a contract system in universities. What happens is that usually an industrial sponsor finds research of interest to a university and then the sponsor and the university pool their resources of scientific talent and equipment, with the work usually taking place on the university campus. This cooperative university-industry research is beneficial for both partners. It is an ideal vehicle for fostering technology transfer from basic research to the market place. And it is in the national interest to encourage joint university-industry programs. But on the other hand, there are misgivings about these joint ventures on the part of both the university and industry. Industrial companies are concerned about how their patent interests can be protected in such partnerships. And the universities are worried about infringement on their academic freedom.

3. Answer the following questions:

1. Does the USA operate a centralized science and technology policy?
2. Is there central planning?
3. What is it said about science establishments in the USA?
4. Does the Federal government sponsor the major part of research through contract system?
5. What 2 types of laboratories does the government maintain?
6. Are government and national laboratories concerned with basic research?
7. What kind of research do these labs do?
8. What national labs do you know? Are they mission-oriented?
9. Do private industrial firms carry out research?
10. What kind of research are private corporations concerned with? Are they concerned with basic or applied research?
11. Do industrial firms sponsor research in universities?
12. What is a cooperative university-industry research?
13. What are advantages and disadvantages of such research? Are they beneficial for both partners?
14. Why is it in the national interest to encourage joint university-industry programs?
15. What are industrial companies and universities worried about?
16. If compare funding from industrial companies and the Federal government which share is bigger?

4. Draw a scheme on the blackboard "How science is organized in the USA".

5. Draw a scheme and speak how science is organized in Russia.

6. Speak about the organization of science in the USA and Russia basing on the schemes.

7. Work with a partner. Imagine you are talking to a research scientist from Brookhaven National Laboratory trying to understand how American science is organized. Ask about the government and the national laboratories and what kind of research they do. Use the following information about Brookhaven National Laboratory:

Situated in Upton, Long Island, N.Y. Research laboratory sponsored by nine northeastern universities under contract with the U.S. government. Principal fields of research: high-energy physics, basic energy sciences, including biology and medical studies of the use and effect of radiation, environmental and energy research. Also encourages use of its facilities by qualified scientists from universities and provides research training in science and technology for visiting scientists and engineers.

8. Work with a partner. Imagine that you are talking to a visiting scientist from the USA in Russia who tries to understand how Russian science is organized. Tell him about what kind of research is done at your Institute. You may use the information about your research Institute given on page 36-44.

1. Study the words and phrases from the text given below and say what the text may be about?

sequence (n) - последовательность

consequence (n) - следствие, результат, вывод

procedure (n) – процедура, порядок осуществления действия

to involve – включать в себя, вовлекать

to recognize a problem – признать/ осознать проблему

to collect information – собирать информацию

to propose a hypothesis/solution – предложить гипотезу/решение

to deduce consequences делать выводы

to test by experiment – проверить экспериментом

to accept a hypothesis – принять гипотезу

to modify a hypothesis – модифицировать/подправить гипотезу

to discard a hypothesis – отказаться от гипотезы.

2. Read the text and be ready for the comprehensive check up.

Scientific Method and Methods of Science

It is sometimes said that there is no such things as the so-called “scientific method”; there are only methods used in science. Nevertheless, it seems clear that there is often a special sequence of procedures which is involved in the establishment of the working principles of science. The sequence is as follows: (1) a problem is recognized, and as much information as possible is collected; (2) a solution (i.e. a hypothesis) is proposed and the consequences arising out of this solution are deduced; (3) these deductions are tested by experiment, and as a result the hypothesis is accepted, modified or discarded.

3. Check up for comprehension:

- 1) Find two sentences which express two different viewpoints on the existence of “scientific method”.
- 2) What words show that the first sentence is an opinion?
- 3) What word shows that these viewpoints are in opposition?
- 4) Find the words equivalent to “scientific method”.
- 5) Using the words given before the texts describe the procedure that the scientist follows in his research. Use passive voice.
- 6) Do you follow such a procedure in your work? What step are you at present?
- 7) Learn the procedure by heart.

1. What does the word “method” mean? What synonyms to the word “method” do you know?

2. Read the text and look up the pronunciation and translation of unknown words in a dictionary.

Research Method

A research is always done using a method, a technique, an approach, a way, means.

A research method can be subdivided into experimental, theoretical, field.

The following procedures can be used in the laboratory and field: observation, sampling, detection, determination, examination, storage, recording, data processing, counting, data refinement, registration.

The following operation can be involved in theoretical methods: calculation, computation, approximation, analysis, consideration, generalization, deduction, assumption, and modeling.

Most experimental and theoretical procedures can be made, conducted, carried out, and performed.

By using a method one can obtain or get some results or data.

A method allows us to, enables us to, provides, prevents.

A method can possess the following features: accuracy, reliability, effectiveness, convenience, feasibility, sensitivity. But a method can have its own limitations, merits, advantages, disadvantages.

A method can be described as accurate reliable, effective, foolproof, sensitive, convenient, feasible, useful, adequate, promising, satisfactory, conventional, current, out-of-date, up-to-date, direct, indirect, inconvenient, inadequate, time-taking, unique, the only.

3. Find synonyms to the words “method” and “carry out” in the text.

4. Answer the questions:

- 1) What can a research method be subdivided into?
- 2) What procedures can be used in labs and fields?
- 3) What operations can be involved in theoretical methods?
- 4) What features can a method possess?
- 5) What methods mentioned in the text do you use in your research?
- 6) Describe briefly any methods used by you in your work? Use characteristics given in the text.

5. The following texts describe two research methods. Study the texts and say if the methods are experimental, field or theoretical. In what field of research can these methods be used?

The Absorbtion Method

To estimate the emission of carbon dioxide speed from soil several methods are used. The absorbtion method is the most simple and perspective among them. It is based on carbon dioxide absorbtion from soil by alkali. The method is used in field experiments. Two vessels with different diameters are placed on a soil surface. The first vessel of a smaller diameter is filled with the solution of alkali. It is covered with the other empty vessel, bottom up. In 24 hours both vessels are taken to the laboratory. The alkali from the first vessel is titrated by acid in the presence of indicator. The amount of carbon dioxide emission by soil is calculated taking into account free running.

Modeling

Modeling is a method of study of subjects on the basis of their models. A model simplifies a problem of learning because it does not take into account a number of inessential factors. Such method allows a researcher to understand what happens to the subject of research from the point of view of an accepted consideration. The method is tested by comparison with processes or phenomena observed under real conditions. Close coincidence defines the model as adequate.

6. Describe any method you use in your work in a similar way. Try to give a detailed description.

1. Before reading the following text make sure that you know the meaning of the words. Practise saying them in English:
Gem (n) – драгоценный камень
Treatment (n) – обработка
Enhancement (n) - улучшение
Inclusion (n) – инклюзия (включение)
Drill (v) – (про)сверлить (отверстие, дырку)
Make for (v) – содействовать, способствовать
Dye (v) – красить, окрашивать
Crack (n) – трещина, изъян, недостаток
Fracture (n) – трещина
Bleach (v) – отбеливать, обесцвечивать
Foil (n) – фольга, станиоль
Rhinestone (n) – разновидность горного хрусталя; фальшивый бриллиант
2. What gems do you know? Find names of some gems in the text.
3. Read the text paying attention to the ways of treating and enhancing gems.

Gem Treatments and Enhancement

Most of the gems that you see on the market today have been treated or enhanced in some way. Some people are disappointed to learn this. The positive side is that because of these treatments and enhancement, you can own and enjoy a fine gem without having to be extremely wealthy or equivalent of royalty.

White Topaz is irradiated and then heated to create Blue Topaz.

Diamond can have inclusions removed by laser drilling. A very thin hole is drilled down to the inclusion and acid is introduced to dissolve it. Now the same “inclusion” is there but it is now a clear vacant space instead of a dark (and easily seen) spot. The Diamond is now a bit more attractive and thus easier to sell.

Emeralds have been oiled since ancient times. Different kinds of oils that have the same or almost the same refractive index are used to fill cracks and fractures. The result is that the cracks are now invisible, thus making for a much more attractive gem. If colored oils are used then it is also dyeing.

Many gems can be dyed if they are porous or cracked. Pearls are often bleached. Coral is too. The backs of gems can be painted to make them seem to be of strong, more intensive color than they really are. Foilbacking is the mirror backing that makes rhinestones so brilliant.

Fracture filling makes cracks and fractures invisible like in oiling except that the process is more durable. This is used in Diamonds and is becoming common in Emeralds too. In Diamonds the fracture fillers use very high heat and pressure to force special glass-like filler into the cracks that reach the surface. In Emeralds a two part clear epoxy called Opticon can be used. Gem treatments are wonderful when they are used to enhance the beauty of a gem.

These treatments can also be misused to sell less expensive gems as their more expensive cousins. Make sure you go to a jeweler or gem dealer who keeps up with new development and can tell the difference.

4. Answer the questions:

- 1) What kind of defects may there be in gems?
- 2) What is a positive side of gem treatment and enhancement?
- 3) What are the ways of enhancement of gems? Comment on some of them.
- 4) Can these ways be called methods of treatment and enhancement of gems?
- 5) What recommendation is given to you when buying a gem?

Becoming Part of the Research Community

1. Read the introduction to the text and say what the ways of becoming part of research community are.

One of the most important things post-graduate students should do is to become established as part of the research community. Your advisor can help with this process by funding conference travel, encouraging you to publish research results early, collaborating on joint publications, introducing you to colleagues, and promoting your work.

In turn, you can make yourself more visible by participating in conferences and **workshops**, publishing papers on your work, and meeting and maintaining contact with colleagues.

2. Read the text and say why it is important to attend conferences and workshops? Do you have to attend conferences only when you make a report? Why?
3. Try to understand the meaning of the words in bold type from the context.

Attending Conferences

Attending conferences and workshops is valuable whether you present a paper or not. Some of the reasons to do so are:

1. You'll meet people and have a chance to discuss your ideas and to hear theirs.
2. You'll get a good sense of what the current state of research is, and will learn more about how to write conference papers and give talks (sometimes by counterexample).
3. You'll probably realize that your ideas are more significant than you thought. A common reaction is "I could write a better paper than this!"

If you're giving a talk you'll gain even more visibility, and will have an opportunity to make an impression on other researchers. Some tips for preparing your talk to make this impression as positive as possible:

1. Give a practice talk, especially if you tend to get **stage fright**. Be sure to invite people who will give you constructive and useful **feedback**.
2. Make sure your talk fits in the **time slot** allocated. There's nothing worse than a speaker who rushes through the last ten slides, or **skips** from the middle of the talk to the conclusion. A good rough rule is **to allocate** 2-3 minutes per slide, on average.
3. It's better to be somewhat abstract than **to get bogged down** in technical details—but be sure you give enough detail to make a convincing case.

Your paper should fill in the missing details, so that people can read it to get a more in-depth understanding.

4. Know your audience: you'll have to give more background to a general audience and more **technical** details to audience that is very familiar with the field of research you're discussing
 5. Use examples and pictures to illustrate and clarify your ideas.
 6. Learn by observation: try to imitate qualities of talks that you like, and avoid things that other speakers do that bother you.
 7. Talk about your ideas informally whenever you get the chance, so that the talk will come more naturally and, hopefully, you'll have a chance to respond to and think about questions that might get asked at the talk.
 8. Make sure your slides are readable and as simple as possible. Never put up a slide with a tiny text and say "I know you can't read this, but..."
 9. Try to relax. Don't read from a script or word-for-word from your slides, and don't talk too fast. Be confident: you know more about your work (**flaws** and all) than anyone else.
-
4. Read the tips for preparing your report again. Work in pairs. Give advice to your partner who is going to report at the conference using modal verbs 'should' or 'ought to'.
 5. Tell your friend what he should/could have done to make his report more understandable.
 1. He spoke in a low voice.
 2. He spoke very fast.
 3. He used very long and complicated sentences.
 4. He read every word from his script.
 5. He spoke looking at the ceiling.
 6. He waved his hands.
 7. He consulted his watch every two minutes.
 8. The text on the slides was very tiny.
 9. He used few pictures to illustrate his ideas.
 6. Check how correct you were at understanding the meaning of the words in bold print:

workshop – a symposium, a seminar

to get stage fright – to be afraid of speaking from the stage
feedback – an evaluative response
a time slot - a time interval
to skip – to go hurriedly from one subject to another when talking
to allocate – to distribute by a plan
to get bogged down – to get stuck with; unable to escape from
technical – connected with a special field of knowledge
flaw – imperfection, fault, defect

1. Check if you remember the meaning of the words:
Workshop (n), symposium (n), proceedings (n), paper (n), article (n), review (n, v), journal (n), a workshop/symposium/conference paper.
2. Why is it important for a post graduate student to publish papers in your opinion?
3. Read the first paragraph and say what the author of this article thinks on this topic.
4. Read the text and find out what properties a good paper should have.
5. The exercise which follows the text will help you to understand the meaning of the words in bold print.

Publishing Papers

Publishing your ideas is important for several reasons: it gives you a source of feedback from people who read your papers; it establishes you as a member of the research community and it forces you to clarify your ideas and **to fit** them in the context of the current state of research in your field.

There are two key properties of a good paper: significant content—original, important ideas that are well developed and tested - and good writing style.

The degree to which the paper's content has to be "significant" depends on where you're **submitting** it. Preliminary ideas and work in progress are more suitable for a workshop or symposium; well developed, extensively tested ideas are more appropriate for a journal. One way to decide where your paper should be submitted is to read papers in potentially appropriate publications (last year's conference proceedings; current journal issues). Another method is to show **a draft** of the paper to your advisor or other colleagues and ask their advice.

If you have a great idea, but present it poorly, your paper probably won't be accepted. Be sure you know what the point of the paper is, and state it clearly and repeatedly. State the problem you're studying, why it's important, how you're solving it, what results you have, how other researchers have dealt with the same or similar problems, and why your method is different or better.

Don't try to put every idea of your thesis into one conference paper. Break it down into pieces, or write one or two longer journal articles.

As you **refine** your ideas, you can re-publish in new forms, but be sure you're adding new material, not just **rehashing** the same ideas. Some papers start as short workshop papers, evolve into conference papers, and eventually—with the addition of detailed empirical results or formal proofs—become journal articles.

It is **critical** that any paper you plan to submit should be read by someone else first if only to check for typos, grammatical errors, and style. A good reviewer will give you feedback on the organization and content of the paper as well. For a workshop paper, having your advisor read it over is probably enough. For a journal paper, you should probably find researchers who are active in the field, preferably at other institutions, read it over and give you comments.

If your paper is **rejected**, keep trying! **Take the reviews to heart** and try to rewrite the paper, addressing the reviewer's comments. You'll get more substantial and useful reviews from journals than conferences or workshops. Often a journal paper will be returned for revisions; usually a conference paper will just be accepted or rejected. After reading the review the first time, put it aside. Come back to it later, reading the paper closely to decide whether the criticisms were valid and how you can address them. You will often find that reviewers make criticisms that are **off-target** because they misinterpreted some aspect of your paper. If so, don't let it **get to you**—just rewrite that part of your paper more clearly so that the same misunderstanding won't happen again. It's **frustrating** to have a paper rejected because of misunderstanding, but at least it's something you can **fix**. On the other hand, criticisms of the content of the paper may require more substantial revisions—rethinking your ideas, running more tests, or redoing an analysis.

6. Replace the words and expressions in italics with those from the text that have the same meaning.

1. Publishing your ideas forces you to clarify your ideas and to *adapt* them in the context of the current state of research in your field. 2. The degree to which the paper's content has to be significant depends on where you are *giving it for consideration*. 3. Another method is to show *an outline (a plan)* of the paper to your advisor. 4. As you *develop* your ideas you can re-publish in new forms but be sure you are adding new material not just *bringing forth again in another form without significant alteration*. 5. It is *important* that any paper you plan to submit should be read by someone just to check for *typographical error*, grammatical errors and style. 6. If your paper is *refused to be accepted*, keep trying. 7. *Take the critical reports seriously* and try to rewrite the paper. 8. You will often find that reviewers make criticisms that are *invalid* and *inaccurate* because they misinterpreted some aspect of your paper. 9. If so, don't let it *influence* you. 10. It is *disappointing* to have a paper rejected because of misunderstanding but at least it's something you can *correct*.

7. Study the text and answer the following questions:

- a. What kinds of papers are more appropriate for a symposium paper and for a journal?
- b. How can you decide where to publish your paper?
- c. What advice does the author give about the content and a writing style of a paper?
- d. What should you do if your paper is rejected.

1. Answer the questions before you read the texts: What do you know about the Irkutsk Science Center? When was it established? How many research institutions are there?

What do you know about the Institute where you work?

2. Read general information about the Irkutsk Science Center and the text about the Institute where you work and say what kind of problems your Institute deals with?

Irkutsk Science Center

The Irkutsk Branch of the Eastern Division of the USSR Academy of Sciences was established in Irkutsk in February, 1949. About 200 research workers were on the staff of the Scientific Institutions of the Branch that time. In 1988 the Irkutsk Branch of scientific institutes got the status of Irkutsk Science Center of the Siberian Division of the Academy of Sciences of the USSR.

Nowadays the Irkutsk Science Center is a large academic multi-discipline establishment which includes scientific and research, science and subsidiary, industrial and economy institutions situated in Irkutsk region and partially in other Siberian regions.

The Irkutsk Science Center incorporates the following institutions:

- the Order of the Red Banner of Labor Institute of Solar-Terrestrial Physics
- the Institute of Energy Systems named after L.A.Melentiev
- the Institute of System Dynamics and Control Theory
- the Institute of the Earth Crust
- the Institute of Geochemistry named after A.P. Vinogradov
- the Institute of Geography
- the Limnological Institute
- the Institute of Chemistry
- the Institute of Plant Physiology and Biochemistry
- the Baikal Museum
- the Irkutsk Branch of the Laser Physics Institute of Siberian Division of Russian Academy of Sciences

The Order of the Red Banner of Labor Institute of Solar-Terrestrial Physics

The Institute was established in 1960 on the basis of the magnetic-meteorological observatory organized in 1886. The first directors of the Institute were N.M. Erofeyev, Corresponding Member of the Academy of Sciences of the Turkmen SSR, and V.E. Stepanov, Corresponding Member of the USSR Academy of Sciences.

The major areas of research of the Institute are interplanetary physics, the physics of the atmosphere and the near-terrestrial space environment.

The Institute is engaged in research of the origin and dynamics of solar magnetic fields, solar flares and other active features on the Sun. Considerable attention is given to the solar wind and cosmic rays.

The subjects of the research are the magnetosphere, the Earth's electromagnetic field, ionosphere, upper atmosphere, the ionospheric propagation of radio waves.

Special attention is paid to the simulation techniques for the phenomena under study and the development of new devices and instruments important for the study of solar-terrestrial relationships.

The Institute is equipped with modern observing facilities including instruments such as a solar radio telescope, a large solar vacuum telescope, a cosmic-ray spectrograph, a radar for measuring ionospheric plasma parameters by the method of incoherent scatter of radio waves.

The Institute deals with receiving and processing the information about the state of terrestrial surface and atmosphere from weather satellites to monitor the environmental and natural resources conditions in the East Siberian region.

The Institute participates in many international projects and programs on solar-terrestrial physics. It cooperates with research groups from the USA, Germany, Great Britain, France, Sweden, Spain, Greece, Japan and other countries.

Institute of Energy Systems named after L.A.Melentev

The Institute owes its creation to the idea of comprehensive energy study and to Academician L.A. Melentiev, a prominent scientist in the field of energy.

The Siberian Energy Institute (SEI) was established in August, 1960 within the Siberian Branch of the USSR Academy of Sciences. L.A.Melentiev, its first director, succeeded in attracting the best graduates of institutes and collaborators of different organizations from Moscow, Leningrad (St.Petersburg), Novosibirsk and Irkutsk who formed the scientific core of the Institute. The atmosphere of democracy, publicity and collectivism was typical of SEI from the very beginning that was called "a spirit of SEI" later on.

The key task of the Institute is comprehensive studies on energy in its broad sense and the objects of studies and applications are energy and physical-technical systems: fuel and energy complexes of areas, regions, country and world comprising electric power, heat-, oil- and gas-supply systems, coal industry, nuclear energy as well as perspective energy technologies and equipment.

The scientific activity of SEI includes the theory of creating energy systems, complexes, plants and their management, scientific foundations and mechanisms for realization of the energy policy of Russia and its regions. It is directed towards creation and development of the theory and methods for systems studies on energy which aim at the comprehensive analysis of energy supply systems and its component parts; analysis of the world, national and regional trends; generation of forecasts, priorities and strategies of development; creation of the scientific-methodological base for optimal planning, design and operation of these objects and their computer-aided control; provision of their reliability and safety; creation of work stations for researchers, designers and operators in this field, etc.

The Institute is engaged in analysis and forecasting of the main trends in energy development of the world, Russia, Siberia; energy programs of different levels; concepts and general schemes for development of industries comprising the fuel and energy complex; new information and computer technologies for studies and control

of the energy sector; problems in creation of interregional and international systems of fuel and energy supply.

IESM has extensive international contacts with different institutions of the European countries and CIS, Japan, China, the USA and is in fact a center of energy studies in both Russia and the world.

Institute of System Dynamics and Control Theory

The Institute was established in 1980 under the name the Irkutsk Computer Center. Main research areas include: stability theory, controllability and other properties of nonlinear systems with a heterogeneous description of subsystems and mathematical control theory for logical-dynamic systems; automation of research.

Institute scientists have created scientific schools world famous for the research in the field of stability theory, logical-dynamic systems and intelligent control, generalized differential equations, computational mathematics and asymptotic methods of mechanics.

Methods of mathematical simulation, optimal and adaptive control, multicriteria decision making, automatic theorem-proving, automated scientific theory formation and methods for creating novel information technologies have been developed and implemented.

For the Irkutsk Scientific center and other institutions a fibre-optic network with a maximum throughput of 100 Mb/s and the Integrated Information Computing Network have been built, with access to Russian and global networks.

The Institute keeps in touch with institutions and scientists from the USA, France, Germany, Italy, Portugal, Japan, China, etc.

Institute of the Earth Crust

The Institute was founded in 1949 as Geological Institute and was renamed in 1962.

The studies run by the Institute focus on two main aspects:

- superficial and deep processes geodynamics, seismicity, groundwater resources and dynamics and geoecology;
- deep structure and paleogeodynamics of the continental lithosphere.

The Institute is a leader in studies of continental rifting. Its main structural and evolutionary regularities have been thoroughly investigated on the examples of rift zones in Eurasia, East Africa and North America. Many years of studies resulted in creation of a synthetic geological geophysical model of the evolution of the Baikal rift zone and the adjacent territories.

The researchers of the Institute have worked out a hypothesis to provide a basis for diamond prospecting and prognostic assessment of diamond-bearing properties of the southern Siberian Platform.

The Institute is a well-known center of neotectonic, morphological and seismogeologic studies. A paleoseismological method of assessment of seismic risk

in the Baikal region and Mongolia has been recently elaborated. Now this method is widely used both in Russia and abroad. The method provided a basis for a new map of seismic zoning of North Eurasia, as well as for assessment of seismic hazard at a number of major engineering construction sites.

In collaboration with French scientists, a network of GPS stations has been installed in the southern and eastern coast of Lake Baikal and in Mongolia to monitor ongoing motion of lithospheric blocks.

The International center of Active Tectonics and Natural Disasters is attached to the Institute. Associate workers from Belgium, Germany, France and China are involved at the Center.

Institute of Geochemistry named after A.P.Vinogradov

The Institute was founded in 1957. The first director of the Institute was Academician L.V.Tauson.

The basic scientific fields are geochemistry of endogenous processes in different geodynamic conditions, geochemistry of environment and sedimentary basins; experimental computer modeling in geochemistry and solid state physics.

The geochemical classification has been developed for magmatic and metamorphic rocks that compose the recent and ancient zones. The first geodynamic map of the USSR and a Mongolian magmatic formation has been compiled. The intraplate magmatism was shown to be connected with the depth of the earth processes. The theory describing formation of geochemical fields has been applied to develop methods of mineral prospecting of gold, base metals and rare elements.

In the framework of International “Baikal Drilling Project” it has been found out that high sedimentation rates and methane generation responsible for gas hydrate formation are typical of deep Baikal basins.

The theory of computer modeling for physical and chemical processes in natural and technological systems has been developed. The available software discloses the significance of fluids for geochemical processes in the earth crust and the upper mantle, the physical conditions of deposit origination, the method to purify sewage waters of local industries.

The conditions for growing crystals with predictable features have been established. New thermoluminescence single crystal detectors of ionizing irradiation have been produced. The technology for obtaining silica to be used in solar power systems has been developed.

Theoretical aspects and different analytical methods of chemical and isotope composition of rock, mineral, soils, bottom sediments, waters metals, alloys, biomaterials, products of air pollution have been developed.

The Institute is known for international and national projects and programs such as “Global changes of environment and climate”, “Baikal Drilling Project” and others.

Institute of Geography

The Institute was founded in 1957. Its organizer director was Academician V.B. Sochava. The Institute is the leading scientific geographic-profile institution in Russia East.

The Institute primary scientific directions involve the status and development of natural geosystems and their components; geographical foundations for the sustainable development of Siberian regions.

Geographic investigations rely on the geosystems theory, created at the Institute and recognized both at home and abroad. The Institute main goal is to conduct fundamental research in the fields of: landscape studies, creating theoretical foundations for predicting and controlling geosystems dynamics, systems mapping, elaborating a geographical groundwork for territorial organisation of production and population formation in Siberia's territory.

Second in importance is the complex mapping of nature, economy and population in various regions. The Institute has become a recognized mapping centre. Atlases of Mongolia, Lake Hovsgol, the Lake Baikal area, the KATEK, an Ecological Atlas of Irkutsk district have been produced, as well as various maps of both regional and special applicability.

Cartographical support is provided for various scientific programmes and projects, preference being given to those concerning the Lake Baikal region.

A sizeable portion of work is related to problems of economical geography and nature-management geography in the country's eastern areas. These include such general issues as the interactions between nature and society, the allocation of production forces, frontier development of new regions, agrogeography, georesource studies, economic zoning and studies of low-level administrative regions, political geography.

The Institute realizes ecological maintenance of large-scale projects, including the tapping of oil and gas fields, the creation of transportation arteries.

The implementation of a Russian-German project produced a landscape-planning methodology, a basis for the sustainable development of a territory, unique for the Russian Federation.

Notable results were also acquired in other sectors of the geographic science, namely, landscape geochemistry, soil geography, biogeography, geomorphology, hydrology, glaciology and climatology.

Limnological Institute

The Limnological Institute traces back to Baikal limnological station organized in 1928. It was the first scientific institution of the Russian Academy of Sciences established in Siberia. In 1961 the station was reorganized into the Limnological Institute of the Siberian Branch of the USSR Academy of Sciences.

The principle directions of the Institute activities are: "Limnology: mechanisms of formation, biodiversity, evolution, present state and prognosis of the development of inland water bodies and rivers". The researchers of the Institute study present and past states of Lake Baikal ecosystems, scientific support of sustainable development of Baikal region, the evolution of Baikal endemic fauna and flora in the context of

geological events, fauna and flora biodiversity, reconstruction of paleoclimates in East Siberia.

The Institute is a leading organization of the Russian Academy of Sciences dealing with problems of Lake Baikal. It possesses a research fleet and the equipment required to collect samples of organisms, water and bottom sediments.

First issues of atlases and keys to fauna and flora of Baikal Lake have been published. The dates of divergence of endemic baikalian fish, crustaceans, mollusks, flat worms, oligoheats diatom algae from their ancestor species have been established by methods of molecular biology.

The Institute took part in implementation of original no-effluent technology of the production of unbleached kraft pulp which was introduced at Selenginsk Pulp and Cardboard Plant.

The Institute has proposed to produce bottled drinking deep water of Lake Baikal. Its industrial production was started in 1997.

The Institute cooperates with lots of Russian and foreign institutions and helps mass media to propagate knowledge about Lake Baikal.

Institute of Chemistry

The Institute was organized in 1957. Its original name was the Institute of Organic Chemistry. In 1997 it was renamed into the Institute of Chemistry. The Institute is one of the largest centers in Russia dealing with basic research in the field of organic and elementoorganic chemistry.

The major research directions are as follows: directed synthesis, investigation of structure and properties of acetylene functional derivatives containing heteroatoms, multiple bonds and heterocycles, the reactivity and structure of organosilicon compounds, wood chemistry and chemistry of natural compounds.

The Institute continues basic research of the structure and chemical behavior of complex organic and elementoorganic molecules, design of substances with predetermined properties. New chemical reactions of fundamental character have been discovered.

New processes and technologies, commercially valuable products and materials such as drugs ecologically friendly pesticides, plant-growth regulators, polymers, fragrant and flavor compounds, sorbents, ion-exchangers, corrosion inhibitors, fuel and oil modifying additives, materials for use in microelectronics and lithium accumulators of new generation, energy-rich substances for rocket fuels, etc. are being created at the Institute.

Much attention is paid to ecology of Irkutsk region and Lake Baikal, concepts of coal-gaspetrochemical and wood-chemical complexes of East Siberia.

The Institute cooperates with scientific institutions from the USA, the Netherlands, Germany, Denmark, Belgium, France, Japan, Israel, Poland, India, China, and Mongolia.

Institute of Plant Physiology and Biochemistry

The Institute was founded in 1961 based on the Department of Biology, the East-Siberian Branch USSR Academy of Sciences. Its initial title was East-Siberian Biological Institute of the Siberian Branch USSR Academy of Sciences. F.E. Reimers, corresponding member of the USSR AS, was a founder and the first Director (1950-1976) of the Institute.

The main research problems are molecular biology of plants, genome structure and gene engineering, mechanisms of resistance and productivity of plants and physiological and ecological problems of biodiversity.

Basic results have been obtained in the field of structure and functions of biological membrane, cell physiology, and hormonal regulation in plants.

Stress proteins and mechanisms of their protective effect under hypo and hyperthermia have been discovered.

An original construction of the “gene gun” has been developed for genetic transformation of plants.

The mechanisms of the effect of industrial emissions on forest ecosystems have been studied and some recommendations have been proposed. The problems of agroecology are under development.

The Institute owns an experimental test site with a complex of greenhouses, hothouse of subtropical and interior plants, two scientific-research stations. The phyotron, first in the east of the country, founded in 1969, comprises 30 climatic chambers, greenhouses, facilities and allows the researchers to perform extensive investigations of the impact produced by various environmental factors on the plants, to develop new diagnostic methods of plant resistance, to accomplish primary selection of plants.

The Institute actively collaborates with scientific institutions of Sweden, Switzerland, Germany, Italy, England, France, the USA and Japan.

Irkutsk Branch of the Laser Physics Institute

The Branch was established in 1995 by reorganizing the Department of Automation and Technical Physics of Presidium of the Irkutsk Scientific Center.

The Branch was founded to conduct fundamental and applied comprehensive research of scientific problems, to develop and introduce laser technologies in industry, ecology and medicine. The Branch conducts research in the following fields: interaction of laser radiation with substance, coherent optics and holography, laser technologies of cutting, welding and surface hardening of different materials. To reveal earthquake precursors the new methods of earth crust deformation analysis are being developed.

The Branch provides methodical and practical assistance to enterprises, factories and organizations of the region in laser technologies in industry and medicine. Medical institutions of Irkutsk successfully use laser therapeutic units developed and constructed by the Branch.

The Branch collaborates with scientific institutions of Russia, Belorussia, Moldova and the USA.

1. What information about your Institute may be added to the given description in your opinion? Make a number of questions and interview your scientific advisor or colleagues from your Institute to find answers.

2. Scan the text, identify passive constructions and give their Russian equivalents as shown in the following examples:

The experiment was carried out ... - Провели эксперимент

Give 3 forms of irregular verbs.

3. Say what research establishments form the Irkutsk Science Center.

4. Make up 1-3 questions to every paragraph of the text about the Institute where you work.

5. Work in pairs. Speak about your Institute. Ask your partner the questions you have made. Answer his questions. Use these expressions in your talk to make it sound more natural and less abrupt:

What about ?

What would you say about...?

By the way, ..

Talking about/of....

Well, .. (to express hesitation or uncertainty;
to introduce a new subject;
to express surprise)

Oh, really?

Actually,...

It depends.

The thing is....

As far as I know,

As far as I remember

6. Work with a partner. Imagine that:

i. you are talking to a visiting scientist from the Netherlands. Tell him what kind of research (basic, applied) is done at your Institute, what well-known scientists in your field of research are working or worked there, who funds your research, what kind of equipment is available, what kind of difficulties you face, etc.

ii. you are on a business trip in Austria. Tell your colleagues what scientific centers in Siberia you know and about science in the Irkutsk Science Center, especially about the Institute where you work. Don't forget to say some words about Irkutsk.

1. Read the text and suggest a title.

My name is Ivanova Anna. I graduated from Irkutsk State University in 2006 and took a post graduate course at Irkutsk Limnological Institute in the same year. I have been working at the Institute since last summer. I am a biologist. In particular I study genetics. I am a geneticist.

The Limnological Institute is situated in Akademgirodok in Ulan-Batorskiy Street. It is a big four-storied building. Limnological Institute originated from a limnological station established by the well-known researcher Gleb Yrievich Vereshagin in 1928. In 1968 the station was reorganized into Limnological Institute of Siberian Department of Academy of Sciences of the USSR. Its first director was an outstanding scientist Grigoriy Ivanovich Galaziy. At present the director of the Institute is Academician Michail Alexandrovich Grachev.

Limnological Institute studies Baikal Lake. The scientists of the Institute investigate ecosystem conditions of the lake in the past and at present, the evolution of endemic fauna and flora, biodiversity of fauna and flora and reconstruction of paleoclimate of Eastern Siberia. There are 11 laboratories at the Institute (for example, the laboratory of hydrobiology, the laboratory of genic systematization, microbiology laboratory and others).

I work at the laboratory of ichthyology. There are 29 people at our lab. The chief of the lab is Melnik Natalya Grigorevna. There is both up-to-date and out-of-date equipment at the lab. There are refrigerators, kelvinators, thermostats, big and small centrifuges and modern computers. Our lab studies biology, physiology, evolution, origin, behaviour features and feeding of fish. Besides, we investigate crustaceans and worms that are parasites and items of feeding for fish.

I work in a group of molecular geneticists which deals with Baikal fish using the methods of molecular biology. We study the origin of species and degrees of relationship among them, the population structures and distributions in Baikal and outside. Molecular biology is a modern direction of biochemistry and genetics. It studies structure and functions of macromolecules such as proteins and DNA. The subject of our study is DNA. The methods of molecular biology are DNA extraction, hybridization, electrophoresis separation of DNA, polymerase chain reaction (PCR) – the method of DNA cloning, sequencing and others. We use the substances available in any chemical laboratory: spirits, acids, ether, etc. But the basic substances we work with are components of synthesis of macromolecules such as enzymes, primers, dinucleatodes.

We carry out a lot of experiments and treat the data obtained by experiments by computer programs comparing sequences of DNA. Comparing nucleotide sequences we determine genetic distances between species. Then we build phylogenetic trees which reflect a degree of relationship between species. It allows us to find answers to some questions of origin, evolution and structure of researched species. If the obtained results seem wrong we conduct an experiment again or search for other methods of research.

The results obtained will be included in my dissertation work which is supposed to be submitted in 2 years. My scientific advisor is Kirilchik Sergey Vasilevich, a senior research worker and a candidate of biological sciences. The aim of my work is the analysis of the population structures of two pelagial species of fish in Baikal – the small golomyanka (oilfish) and the big golomyanka. The golomyanka plays a key role in biological processes proceeding in the lake and is a system which can serve as an indicator of these processes. The nucleotide sequence of a DNA loop of mitochondrial DNA and microsatellite repetitions of nuclear genome is used as a molecular and genomic marker.

As I have been working on the topic only for half a year I have not had any articles published yet but I am to make a report at the conference in a month so I think that after the conference I shall write an article for a journal.

2. Read the text again and make up a plan.
3. Read the text again and find and write down key words from the text.
4. What information would you add to your story about your research work?
5. Using the plan you made and the key words, write a story about your research work. Use the information about your institute, research methods, publishing papers, attending conferences, etc. you studied before.
6. Work in pairs. Ask each other the following questions about your work:

1. What university (Institute) did you study at?
2. When did you graduate from the university (institute)?
3. Where do you work? (What Institute do you work at?) How long have you been working there?
4. What is your profession?
5. Where is your Institute situated? Is it far from your house?
6. How long does it take you to get to your Institute?
7. How do you get to your Institute? Do you go by bus or on foot?
8. Do you have any changes?
9. Does your Institute occupy one building or several?
10. Is the building of your Institute large?
11. When was the Institute founded (established)?
12. Who is the founder of the Institute?
13. Who is the Institute named after?
14. Who is the Head (Director) of the Institute?
15. Is there a Scientific Council at your Institute?
16. Who is the learned secretary?
17. Does your Institute hold any conferences, symposia, seminars?
18. Are there any distinguished (outstanding) scientists at your Institute?
19. What kind of problem does the Institute deal with?
20. What is the key problem the Institute solving now?

21. How many laboratories are there at the Institute?
22. What laboratory do you work at?
23. Is your lab large or small? How many workers (collaborators) are there in your laboratory?
24. Who is the chief of your lab (Academician, Corresponding member, Doctor of science)
25. How many research workers are there in the lab?
26. Are there many lab assistants at your lab?
27. Are there any senior and junior research workers at the lab?
28. How is your laboratory equipped?
29. Are there any big installations at your lab and what are they?
30. Is it a modern (up-to-date) or out-of-date equipment?
31. What kind of research does your laboratory carry out?
32. How long does one experiment last?
33. How do the associates of your lab treat the results of the experiments?
34. Is it possible to check the data of the experiment and by what means?
35. Are you a theoretician or an experimenter?
36. What do you investigate?
37. Do you explore new areas of physics (chemistry, astronomy, biology, mathematics, geology, etc)?
38. Do you work in a team or do you have an individual topic? (Do you carry out individual research work or in collaboration with your research team?)
39. Who is the head of your lab?
40. What substances do you work with?
41. What methods do you use in your research?
42. What problems are you going to solve in your experiments?
43. What do you usually do when the experiment is over?
44. How do you collect the data? What do you do with the data obtained?
45. Are the data from your experiments always convincing and explicit?
46. What do you usually do if the data obtained from your experiments are confusing and controversial?
47. Is it difficult to analyze the results?
48. Do the data obtained enable you to come to important conclusions?
49. What is the purpose of your present research work?
50. When did you take your post-graduate course?
51. Who is your scientific advisor (supervisor)?
52. Do you work at your thesis (dissertation)?
53. When are you supposed to submit your thesis?
54. What part of your thesis have you already completed?
55. Is the experimental part of your thesis completed?
56. Have you already had any published papers?
57. What scientific degree will you get?
58. Have you ever attended a scientific congress (conference, symposium)?
59. What problem was it devoted to?
60. When and where was it held?

61. Where there any foreign delegates invited? What was the working language of the conference?
62. What was the subject under discussion?
63. What was the number of sections at work and how many sections were held simultaneously?
64. Which of the problems touched upon attracted general attention and why?
65. What is your contribution to that conference? Did you benefit from that conference?
66. How much time were you allowed to develop your subject/ to discussions?
67. Did you take part in any of these discussions?
68. Were there any interesting tours or excursions arranged for its participants?
69. Was there any banquet given to the participants and guests of this congress?
70. Are you going to attend any other scientific gathering of this kind in the nearest future?
71. When and where is it going to be held?

How to Propose for a Grant

Where there is will, there is a way

1. Match the words in column A with the meanings in column B

A	B
grant	a recipient of a grant
funder	any organization, foundation, business or governmental agency that finances the costs of a program activity
proposal/application	a cash award to an individual or organization to undertake specific activity
grantee/ applicant	a written request for funding for a specific activity or activities

2. Read the title of the text and say what you already know about the topic?
The following words may help you: to propose/apply for a grant, proposal/application for a grant, to fund/budget/ sponsor programs/projects, to do basic/applied research, educational programs, travel, equipment, study abroad
3. What would you like to learn about grants in the text? Make three questions the text may answer.
4. Read the text section headings and predict what information you can find in every section.
5. Skim the text and make the tasks given after the text.

Grant Proposal

Proposal writing tips

The first step to getting a grant is to research thoroughly sources and determine which are most likely to fund your project. There are a number of sources for funding your ideas, in Russia and abroad. You can use personal contacts, books, journals, and the World Wide Web to research the possibilities (a list of recommended resources is attached).

Your proposal should incorporate all necessary information in a simple, clear manner. Use active constructions, not passive ones. Your proposal should be easy-to-read, interesting and convincing. Keep your sentences and paragraphs short – break up sentences more than 30 words long.

Make sure the most important and convincing information is at the beginning of your proposal. If it's difficult to find the important information in your proposal, it may be rejected without having ever been seriously considered.

The Components

Who are you?

“The Introduction” is a part of the proposal that summarizes your organization’s background, goals, and methods. When writing your introduction, focus on what makes your organization unique in providing the kinds of services you propose. Emphasize the strength of your organization. An organizational strength may be:

- The number of years your organization has existed
- Your success record with similar projects, or with past grants
- The unique skills and experience of your project staff
- The credibility of your partners.

If your organization’s strength is the people who work for it, rather than the organization’s history, emphasize their skills and experience.

Your introduction should be strong but brief.

What is the need?

Your “Need Statement” should describe the need your project will meet. You must clearly understand what you really need to realize your project.

Your Need Statement will be the basis on which you build your objectives and methods.

It is good idea to summarize your Need Statement in a single sentence of 25 words or less. You may need to add background details, but the need itself should be stated first, clearly and briefly and convincingly.

Once you’ve stated the need, make clear who will benefit from your project. In most cases, the primary beneficiary should not be you or your organization. Instead, the project should benefit your clients. You need to know who they are.

Make sure that the problem is of interest to the funder. At the same time, your project must relate to the mission of your organization.

Your Need Statement should be concrete, but include enough details so that your funding source will understand the depth of the need. If you are applying to an organization that does not specialize in Russia, you may need to provide more background to help them to understand the need.

Support your Need statement with statistics and cite their sources.

Be sure that your proposal doesn’t duplicate a project that is already being implemented.

What will you do?

In this part of the proposal, “the Objectives” section, you should *clearly state* the aims of your project. Your objectives should *flow naturally from your Need Statement*. They should be concrete solutions to the needs you identified.

Your objectives should be *possible to reach in the time period* stated in your proposal.

Be positive about your objectives and present them in a way that makes it clear they *can be reasonably achieved*.

How will you do it?

In “the Method” section, you should describe in detail the process for meeting your objectives. This section may be longer than other sections of your proposal. This is where you describe the details of your project activities.

You should create a chart of program activities that match the objectives and timeframe in your Objectives section. Break down the precise steps it will take to achieve each objective. What tasks are involved? How much time will each task require?

You may need to justify your methods, especially if they are unusual or experimental. Emphasize the uniqueness of your approach. Explain the strength of your methods, and defend their weakness.

You should briefly describe the role of each member of your staff, and briefly (in no more than 2-3 sentences) describe their background and qualification for the position. You should include detailed resumes or CVs for the most important people who will be working on the project as attachment. Usually you should include no more than four resumes for a single project, unless the funder specifies otherwise.

If you will be using consultants, this piece of proposal is especially important.

Although you may have identified your clients broadly in “the Objective” section, you must clearly define them in your “Method” section. How will they be selected?

Finally you should evaluate the success of your project in meeting its objectives. Each of your objectives should be evaluated separately.

You may wish to include examples of the tools you will use as an attachment.

How much will it cost?

The Budget section should consist of two parts: a detailed list of expenses usually in the form of a spreadsheet (в формате электронной таблицы) and explanatory notes often referred to as a budget narrative (бюджетное описание). Your budget should correlate to the activities you list in your Method section. How much will it cost to carry them out? This is no time for guesswork.

Research the market to ensure your budget is accurate and reasonable.

Your budget should be broken down into several headings, such as:

- personal (оплата труда персонала)
- supplies (канцтовары и прочие материалы)
- equipment (оборудование)
- travel (расходы на командировки и поездки)
- communication (telephone and e-mail) (расходы на связь)
- publicity/publications (расходы на рекламу и публикации)

Most funders expect applicants to share the costs of the project they propose. Show the contribution of your organization in the project.

Your project is much more likely to get funding if you can show a commitment from another funder to cover a portion of the expenses of your project.

Most funders are concerned about project sustainability (устойчивости). If you are able to show that your project will be financially sustainable after the period of the grant, you will have a much better chance of getting funded. You should have a plan for funding the project in the future.

Web Sites

<http://www.tsu.ru/~science/rus/fond/fbase/Fondlist.htm>

A database of links to foundations (in English and Russian)

<http://www.voiceinternational.org/fd/russia.htm>

Links to funding sources that give grants in Russia (in English)

<http://www.charitynet.org./main.html>

A good source of links and resources for NGOs (in English)

<http://www.msu.ru/russian/inside/etis/grros.html>

Information on Russian grant sources (in Russian)

http://www.osi.hu/brussels/guide2000/funding_index.html

A guide funding and participation in European Union programs (in English)

Educational Scholarships

<http://www.chevening.ru>

Chevening Grant

<http://www.iie.ru/ifp>

Ford Grant

<http://www.scholarships.ed.ac.uk/postgraduate/uk/baltika.htm>

Edinburg University Scholarship

<http://www.gla.ac.uk/faculties/medicine/gradschool/partsscholarships.html>

Glasgow University Scholarship

<http://www.ncl.ac.uk/international/scholarships/undergraduate/index.phtml>

Newcastle University Scholarship

<http://www.bath.ac.uk/news/2007/1/18/internationalscholarships.html>

Bath University Scholarship

1.1. Read “Proposal and Writing Tips” section again.

1.2. Choose the right answer:

a) The first step to getting a grant is

- to think how much money you need and multiply the sum by 3.
- to tell your scientific advisor that you are lack of money
- to tell your scientific advisor that you can do without his/her help
- to research thoroughly grant sources and determine which are most likely to fund your project.

b) You proposal should incorporate

- long, detailed explanation of your project
- complicated passive grammar constructions
- long, more than 30 words sentences
- information written in a simple, clear manner.

c) The most important and convincing information should be

- at the end of your proposal
- at the beginning of your proposal
- very difficult to be found
- written in Russian even if you submit your proposal to a foreign fund.

1.3. Enumerate what advice the author gives how to write a proposal for a grant.

2.1. Read “What are you” section again.

2.2. There are synonyms to some of the words from the section. Find the word which synonyms are given wrong.

focus (v) – emphasize, stress

goal (n) – aim, objective, purpose

credibility (n) – reliability

brief (n) – short, compact

unique (adj.) – rare, singular

success – failure, collapse, breakdown

skill (n) – ability, talent

background (n) – origin, history

realize (v) – implement

2.3. What should you write in the section “Who are you”?

3.1. Read the section “What is the need?” again.

3.2. These are the words from the text. Match the words given on the right with the words given on the left.

staff (n)

appropriate, suitable

mission (n)

group of people working together under a manager
or head

benefit (v)

to complete, fulfill, realize a task

beneficiary (n)

person who receives a benefit

implement (v)

task, duty, work, undertaking

relevant (adj.) to take profit, take advantage

3.3. Complete “the Need Statement” instructions:

The Need statement should be:

- a) stated clearly and _____;
- b) relevant to the needs of your _____;
- c) relevant to the interest of your _____;
- d) relevant to the mission of your _____;
- e) possible to _____.

4.1. Read the section “What will you do?” again.

4.2. What will you write in this section of your grant?

4.2. Write a 4 sentences instruction how to state your objectives basing on the words italicized in the text.

5.1. Read “How will you do it?” again.

5.2. What is the main idea of the paragraph?

5.3. What is CV stand for?

Remember if you do not know:

Resume – a listing of experience and achievements relevant to a particular profession.

Curriculum Vitae – a detailed listing of one’s academic and professional achievements, usually used by educators, doctors or other professionals whose academic history is especially relevant.

5.4. Find English equivalents for the following expressions in the text:

достигать цели –

соответствовать целям и срокам исполнения –

обосновывать избранные вами методы –

подчеркивать уникальность предлагаемого вами подхода –

включить подробное резюме в приложение –

четко определить основных потребителей услуг –

оценить результаты своей работы/проекта по достижению заявленных целей.

5.5. What should your “Method” section include?

6.1. Read “How much will it cost” section again.

6.2. In what form should you present your “Budget” section?

6.3. The verb “sustain” means “to maintain, to keep in existence, to keep going”. How do you understand “project sustainability”? What is it in your opinion?

7.1. Match the components of the grant proposal on the left and what they describe on the right. Give their correct order in a proposal.

The Need Statement (section)	summarizes your organization background.
The Introduction	states the aims of the project.
The Objectives	describes the need you project will meet.
The Method	lists expenses you'll do.
The Budget	describes in detail the process for achieving your aims.

- Using the recommendations how to propose for a grant, write your own proposal. Be ready to comment on it.

Appendix

A tapescript from “Blueprint” 2, Brian Abbs and Ingrid Freebairn, Unit 7, ex.8.

- What sort of qualities do you look for in a personal assistant?
- Well, first of all, I need someone who is one hundred percent reliable and efficient.
- So, you think that’s the most important thing to be reliable and efficient.
- Yes, I did.
- And how intelligent do they need to be?
- I would say... I think it helps if they are intelligent. The best personal assistants are always intelligent.
- And is appearance important?
- Well, of course it’s important in business to look smart but you don’t have to be a fashion model.
- Right. What about personality?
- Well, I like someone who is friendly. That’s important when you are all working together, of course.

Tapescript 18 from “Language Passport”. Preparing for the IELTS interview. Carolyn Catt

I’d like to become a hotel receptionist because I enjoy people. E... the way I see it, I’d make a good receptionist because I particularly like meeting people from different countries. And I’ve got a really friendly manner – or so my friends tell me – and on the top of that I’m very patient.

Another reason why I believe it would suit me is that I always like to look neat and tidy – I really take care of my appearance, and that’s important for a receptionist.

And, well, finally it seems to me that I also have the right skills and qualifications – I speak three languages, I can type and have a certificate in hospitality and tourism.

So, all-in-all, I feel it’s the right job for me and that I’d be good at it. I’m really keen on the idea of getting a position with an international chain of hotels and moving from country to country working for the same organization.

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