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МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ

по организации и методическому сопровождению самостоятельной работы студентов

при изучении общеобразовательной учебной дисциплины

ОУД.06 ИНОСТРАННЫЙ ЯЗЫК

по специальности

21.02.03 Сооружение и эксплуатация

газонефтепроводов и газонефтехранилищ

1. ОБЩИЕ ПОЛОЖЕНИЯ ПО ПЛАНИРОВАНИЮ И ОРГАНИЗАЦИИ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ

1.1. Методические рекомендации по организации и методическому сопровождению самостоятельной работы обучающихся СПО разработаны согласно Федеральному закону Российской Федерации от 29 декабря 2012 г. N 273-ФЗ "Об образовании в Российской Федерации"; ФГОС СОО; Приказу Минпросвещения России от 24.08.2022 N 762 "Об утверждении Порядка организации и осуществления образовательной деятельности по образовательным программам среднего профессионального образования", Положения об организации самостоятельной работы студентов, Методических рекомендаций по организации и методическому сопровождению самостоятельной работы студентов СПО.

2. ВИДЫ И ФОРМЫ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ ПО ОБЩЕОБРАЗОВАТЕЛЬНОЙ УЧЕБНОЙ ДИСЦИПЛИНЕ

2.1. Общеобразовательной учебной дисциплиной «Иностранный язык» предусмотрен следующий объем самостоятельной работы обучающихся:

Вид самостоятельной работы	Объем часов (очно/заочно/очно-заочно)
студентов	
Внеаудиторная самостоятельная	-/64
работа	

2.2. Формы самостоятельной работы, виды заданий по учебным темам:

Самостоятельная работа обучающихся

Самостоятельная работа № 1. Приветствие, прощание. Представление себя и других людей в официальной и неофициальной обстановке, объём часов: 2.

Задание:

Ex. 1. Put the following expressions into the correct columns below.

Hello, Goodbye, or Thank You?

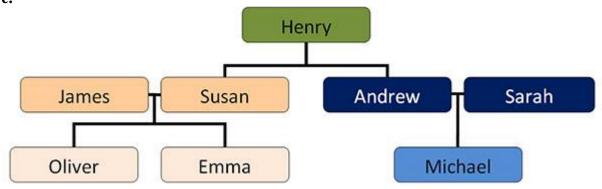
Put the following expressions into the correct column below.

It was nice to meet you	What's new	Much obliged
Take care	Cheers	Good afternoon
Та	'Sup	Thanks
What's going on	Catch ya (catch you)	Good evening
See ya (see you)	How's it going	What's shaking
Later	Take it easy	What's up
How's life	Sweet as	Good night
Morning	Hey	Cool
Right on	It's nice to meet you	I'm in your debt
I owe you one	Have fun	Ciao ("chow")
HELLO	GOODBYE	THANK YOU

Самостоятельная работа № 2. Отношения поколений в семье, объём часов: 2.

Задание:

Ex. Look at the family tree. Use the words below and say in which relations these people are.



Aunt Brother Cousin Father Grandfather Grandmother Mother

Example:

Oliver is Emma's brother.

Andrew is Michael's...

Sarah is Michael's...

Emma is Oliver's...

Henry is Emma's...

James is Emma's...

Andrew is Emma's...

Michael is Oliver's...

Susan is Michael's...

Susan is Andrew's...

Source: https://www.englisch-hilfen.de/en/exercises/family/family_tree.htm

Самостоятельная работа № 3. Описание внешности и характера человека, объём часов: 2.

Задание:

Ex. 1. Translate into Russian.

The kids are being so noisy today. My head hurts!

She has long black hair and large green eyes. Her face was very kind.

My dog is very funny – it has thick eyebrows and a pink wet nose.

When she woke up in the morning, she stretched her arms and legs slowly and lazily.

Don't run too fast if your stomach is full.

She wore headphones in her ears.

The woman on the poster looked wonderful – she had a beautiful mouth, slim legs and delicate hands, her blonde hair covering her forehead.

He fell and hurt his knee badly when he was playing football yesterday.

These shoes fit me quite well - my feet are very comfortable in them.

Ex. 2. Think of suitable hobbies or sports for these types of people:

creative, artistic, friendly, sociable, adventurous, brave, intelligent, musical, active, fit, patient, quiet, shy

(cooking, motor-car racing, photography, sailing, collecting, tennis, walking, windsurfing, drawing, singing, dancing, cricket, rugby, athletics, extreme sports, winter sports, water sports)

"If a person is adventurous, extreme sports could be a good hobby for him/her/them".

What hobbies and sports do you do? Explain why you think you have the right personality for them:

"I like drawing because I am artistic". "I am active and fit and that's why I like athletics".

Самостоятельная работа № 4. Рабочий день, объём часов: 2.

Задание:

Ex. 1. Read the text and answer the questions after the text.

The Importance of Work-Life Balance

By Jacob Shriar

Too many of us don't understand the importance of balancing work and our personal lives. Too many of us focus way too much on work, and neglect our personal lives, ruining relationships with family and friends.

This is actually having negative long term effects. In an article published looking at work life balance in Canada, they found that many younger workers were avoiding having children altogether to focus on their career.

To me that's sad.

Recently, South Korea decided to put much more emphasis on work life balance, when they saw fertility rates dropping drastically. We could definitely learn something from them.

Some people argue for a work life blend, instead of work life balance, but I'm not sure if that's the right answer. There's no need to blend work into your life. It's important to separate the two.

For example, I have a rule at my house where there are no cell phones/iPads allowed at the dinner table. When we're eating dinner as a family, we take time to connect, and take time to be with each other, away from work and other distractions.

We all need to start prioritizing better, and understanding that most of our expectations about how much work we should be doing are too high.

In fact, in a study done by Accenture, they found that having a good work life balance is the key to a successful career.

There was a major Canadian study by Carleton University's Linda Duxbury about work life balance, and what she found was:

- Most Canadian employees still work a fixed 9-5 schedule.
- 57% of those surveyed reported high levels of stress.
- Employees in the survey were twice as likely to let work interfere with family as the reverse.

Employers Should Encourage Work Life Balance

It's important that employers actively encourage a work life balance. It will have such a dramatic increase in productivity, and most of the things that you can do to fix this are free. Remember, time is the most precious gift you can give.

Here are 3 ideas for employers to implement:

- Offer Flexible Schedules Give employees the freedom to fit personal things into their lives. Telecommuting should be an option, especially if the weather is bad. It saves so much stress and time travelling. An easy thing to implement is shifts, where you allow employees who might not like the idea of 9-5, to work from 10-6 or 11-7 instead.
- Offer Unlimited Vacations It's a clear sign that you respect your employees enough to make their own decisions.
- Be A Good Role Model Remember that employees look up to their managers, and they especially look up to senior leadership. If they see their managers working non-stop, they won't feel okay looking for work life balance. Keep that in mind, and make sure to be a good role model.
- 1. Do you agree that there should be a balance between work and life?
- 2. Is it easy for you to achieve it?
- 3. Do you agree with the author's advice?
- 4. Are there any other tips on work-life balance that you could give?
- 5. What do you think are the reasons why people nowadays work so much?

Самостоятельная работа № 5. Досуг. Хобби, объём часов: 2.

Залание:

Ex. 1. Read the text. Speak about your hobbies using the model phrases from the text.

Talking About Your Hobbies in English

When you want to get to know someone, ask about their hobbies and interests. Talking about hobbies means you can share details about yourself – and discover shared interests and free-time activities.

Here are some phrases you can use.

Questions you can ask:

What do you like doing?
What sort of hobbies do you have?
What do you get up to in your free time?

How to reply

In my free time I...
When I have some spare time I...
When I get the time, I...
I relax by watching TV / listening to music, etc.
My hobbies are bird-watching / playing sport, etc.

I'm interested in (+ noun / gerund)
I'm keen on (+ noun / gerund)
I'm into (+ noun / gerund)
I enjoy (+ noun / gerund)

You can add "really" or "quite" after "I'm..." for emphasis.

"I'm really keen on football."

"I'm really into geneaology."

Talking about hobbies in more detail

Source: https://english-at-home.com/speaking/talking-about-your-h

Самостоятельная работа № 6. Активный и пассивный отдых, объём часов: 2.

Задание:

Ex 1. The people below (1–5) all want to watch a TV programme. Under letters A–H, there are descriptions of four TV programmes. Decide which programme would be the most suitable for which people. Explain your choice.

- 1. Ivan and Anna like to keep up to date with what's happening in the world and enjoy seeing interviews with politicians and other people. They prefer to watch programmes which last about 30 minutes.
- 2. Fatima likes watching comedy programmes which last about half an hour. She enjoys watching a series where she can follow what the characters are doing.

- 3. Rosa enjoys pop music and films and wants to watch interviews with popular celebrities. She likes programmes which are a mixture of interviews and live music.
- 4. Grace is interested in travelling and she likes watching documentaries about different parts of the world. She especially enjoys programmes which show animals and birds.
- 5. William is keen on general knowledge and likes watching quizzes to see how many questions he can answer. He prefers those which have questions on lots of different subjects.

- A. Find out about the life of jazz musician, Bert Randall, in this hour-long documentary which shows him performing live concerts during his life. There are interviews with members of his family and people he worked with.
- B. This is the weekly chance to try to get a better score than the celebrities in the studio, who range from pop musicians to politicians. As usual Billie Flannagan spends a half hour asking the two teams the questions. They need to be experts in a wide range of topics from music to animals to international news.
- C. Find out about the latest news, both international and local, with Aaron Willis every day between 6.00 and 6.30 in the evening. His interviews with those in the news, whether they are politicians or journalists, always get to the point of a story.
- D. Every Saturday evening between 8.30 and 9.30, Kevin Connery presents an hour of fun and entertainment. As usual in the new series, there is music and chat with well-known stars from the world of film, music or comedy. Each guest is interviewed and then one of them performs their latest song live.
- E. There are three half-hour episodes of the popular soap South Street on our TVs every week. There's lots going on this week when Cathy returns from her trip round the world to find Felicity has moved into her flat and all Cathy's things have disappeared. She is not pleased and shows her feelings.
- F. Robert Burroughs first visited the Amazon rainforest 40 years ago. Since then, he has travelled all around the world showing us amazing scenery, animals and different ways of living. Now he returns with a series about the Amazon and we see again the amazing wildlife of this beautiful area.
- G. On the Way is a short comedy film made 30 years ago. The actors were unknown at the time but they have since become famous. The main character, Zak, decides to travel to India but he takes a variety of animals with him on the journey. They soon become a problem.
- H. Joel and Charlie return for another series of The Shop. They work in a supermarket where things seem to go wrong every day. This series should be as funny as the last, with a new manager in the shop and some unexpected events in each 30-minute programme.

Самостоятельная работа № 7. Особенности проживания в городе. Инфраструктура. Как спросить и указать дорогу, объём часов: 2.

Задание:

Ex. 1. Watch the video about city life. Use words and expressions from the video in sentences of your own.

"Vocabulary to talk about living in cities"

https://www.youtube.com/watch?v=ouzZsrYlb94

Самостоятельная работа № 8. Описание здания, интерьера. Описание колледжа (здание, обстановка, условия жизни, техника, оборудование). Описание кабинета иностранного языка, объём часов: 2.

Задание:

Ex. 1. Read the text. Describe the place where you live using this text as an example.

My House

I live in a small house. It's located in Arjuna Street Milkytown. There is a large yard in front of my house. My father plants a mango tree there. On the right side of my house there is a garden. My mother likes gardening in this garden. There are many kinds of flowers, such as: rose, dahlias and many other that I don't know its name. On the left side there is my grandmother's house. And on the back side there are many banana trees which are planted by my father.

From the outside, my house is green in colour. There are 8 rooms in my house. There are living room, 2 bedrooms, a family room, 2 kitchen, ware house and bathroom.

When you enter my house, you will see a small living room with 3 chairs, and flowers on the table. There are photos of my families on the wall. The colour of this room is pink. So you will feel another atmosphere after entering this room.

My bedroom is next to the living room. In my room there are a cupboard, large bed, table, and music player with the speaker. This room is different from the colour. My bedroom is green and the other rooms are pink. I like reading in this room, because no one will disturb me.

In front of my bedroom there is a special room for guest to have lunch or dinner. And sometimes I always study together with my friends there. There are no chairs at all, just a carpet with a short table and we can relax here.

On the right side of my bedroom is my parents'. There are a bed, dressing table, chair and a cupboard. This room is as large as my bedroom.

The family room is in front of my parents' room. There are a carpet, small table, and television. My parents and I always have a talk in this room. We usually gather in the evening and I always share my activities with them. This room is also used for having lunch together.

We have two kitchens. The first is located between the bathroom and my parents' room. The function of this kitchen is to cook with modern equipments, such as gas stove, blender, and there is a refrigerator in this room. My mother always does her work as a house wife here. She always prepare my breakfast, lunch and dinner there. The other kitchen is behind the first kitchen next to the bathroom. My mother usually uses this kitchen to cook food traditionally, by using wood in the earthen stove.

The bathroom is behind the first kitchen. And next to it is a ware house. It is used to keep wood and broken equipment that can not be used.

Although it's a small house, it's like a paradise for me, the place where I find happiness, care, and love from my family.

Source: http://ujiklifeline.blogspot.com/2013/01/example-of-description-text-about-my.html

Самостоятельная работа № 9. Виды магазинов, объём часов: 2.

Залание:

Ex. 1. Ex. 1. Watch the video about different types of shops. Tell about the shops that you have recently gone to.

"Shops & Stores English Glossary | Types of Store | UK + USA English"

https://www.youtube.com/watch?v=9dCiUpXUr1I

Самостоятельная работа № 10. Совершение покупок в продуктовом магазине, объём часов: 2.

Задание:

Ex. Read and translate the dialogue. Do the Multiple Choice test.

Café worker: Next, please! What would you like?

Andi: Can I have a burger, please?

Café worker: A cheese burger or double cheese burger?

Andi: Double cheese burger, please.

Café worker: Anything else?

Andi: Yeah, I'd like some banana cake.

Café worker: Would you like a drink?

Andi: Yes, can I have an apple juice, please?

Café worker: OK, so that's one double cheese burger, one banana cake and an apple juice. What's your table number?

Andi: Table 3. How much is that?

Café worker: That's £8.37, please.

Andi: Here you are.

Café worker: Thank you ... that's £10.00 ... and £1.63 change. Next, please ...

For his main course, Andi chooses ...

- a) a normal cheese burger.
- b) a double cheese burger.
- c) a burger with chips.

For dessert, Andi chooses ...

- a) ice cream.
- b) chocolate cake.
- c) banana cake.

Самостояте, объём часов Задание:		та № 11. Со	овершение	покупок	в магазине	одежды/обуви,
Ex 1. Fill in t	he dialogue	with the given	words.			
FIT	THIS	SIZE	TAKE			
TRY	HELP	MEDIUM				
Shop assistant	t:	Hello! Can I		you?		
Customer:		please. Have y	ou got	T-shirt in	red?	
Shop assistant		Yes. What	are you	1?		
Customer:	I'm		·			
Shop assistant	t:	Here.	this one on.			
A little later						
Shop assistant	t:	Does it	?			
Customer:		perfect. I'll	it.			
	-	with the appro		c		
			_			
DO THEY F	IT? SIZ	ZE ARE	YOU ARE	OF C	OURSE	
JUST LOOK	ING T	AKE THEM				
TOO SMAL	L ARE	E PERFECT	TRY TH	IESE		
TRY THESE	ONES ON.	A BIGGI	ER SIZE			
Shop assistant	t:	Hello! Can I	help you?			
Customer: <i>A little later</i>	No,	thank you. I'm				
Customer:	Can	shoes	s on, please?			
Shop assistant	t:					
A little later						
Shop assistant	t:	?	_			
Customer:	No,	they are	Have you	ı got	?	
Shop assistant Customer:	t: 40.	What	you?			
Shop assistant	t:	Here				
Customer:	They	. I'	11			

Самостоятельная работа № 12. Физическая культура и спорт. Здоровый образ жизни, объём часов: 2.

Задание:

Ex. 1. Read the interview. Translate the words in bold. Use them in sentences of your own.

Interviewer (**I**): Do you do any sports?

Loiuse: Not really... no... I always say I'm going to take up exercise and try to get into shape but I never seem to get started... I sometimes wonder whether I should get a personal trainer... someone who will sort out a fitness programme for me and make me train hard....

Interviewer (I): How do you spend a typical weekend?

Stella: I'm a big **football fan** and weekends always centre around **a football match**... I support FC Utrecht and have **a season ticket** so I go to most of the **home games** and quite a few of the **away games** too... I'm really looking forward to the new **football season** starting soon...

Interviewer (I): Have you got any hobbies or interests?

Theo: Yes... I'm really keen on sports... I **do judo** once a week and **play tennis** in the summer... I think it's really important **to keep fit** ... it makes you feel good and energised for work and your studies....

Interviewer (**I**): Should people be encouraged more to take up sport?

Alejandro: I think young people should be given the chance to discover which sport they might like... watching sport is sometimes a good way to get people started... not on TV but actually getting out... take athletics for example... they could go to **an athletics meeting**... there are so many different sports on show one might interest them...

Interviewer (I): Why do some people enjoy participating in sport more than others?

Florrie: That's a good question... I suppose some people are more concerned about their health... they can't stand the thought of **being out of condition**... other people might be driven to excel... they want **to set records** or get **personal bests**...

Interviewer (I): Which sports do you think are best for people who aren't used to physical activity?

Julie: Well... I think people like this should avoid strenuous exercise so things like circuit training are definitely out of the question... maybe just doing a brisk walk every day... or swimming is always a good way to get started ...

Самостоятельная работа № 13. Еда полезная и вредная, объём часов: 2.

Задание:

Ex. 1. Read the example phrases and make up requests and orders of your own.

Food. In a restaurant.

Would you like to order now?

What would you like to eat/drink?

Would you like anything else?

Can I have I'd like	a bottle of wine, mineral water a cup of tea, coffee a glass of milk, juice a plate of cereal a bar of chocolate a slice/piece of bread, cake a kilo of apples some cheese, jam, bread	, please? , please.
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Ex. 2. Translate into English.

- А. В этом ресторане вы можете заказать восхитительную и здоровую еду.
- В. Вредная и «быстрая» еда может вызвать различные заболевания.
- С. Чтобы оставаться здоровыми, вам следует есть больше фруктов, овощей и круп.
- D. Натуральные продукты содержат полезные вещества: белки, клетчатку, витамины.
- Е. Я не люблю молочные продукты, хотя знаю, что они важны для здоровья.

Самостоятельная работа № 14. Почему и как люди путешествуют, объём часов: 2.

Задание:

Ex. 1. Describe a tourist attraction you once visited. You should say: when you visited it; where it is situated; who you went there with; what about it you liked the most.

Sample answer:

"A couple of years ago I went on a holiday to Paris with my parents... it is a very popular tourist destination, since it has various places of interest, such as ancient museums and monuments... That's why there are always hordes of tourists... So we decided to go out of season in the autumn... Fortunately, the weather was great, and we did not waste any days watching TV at the hotel... it was a memorable holiday ... we enjoyed breathtaking views from the top of the Eiffel Tower and dined in cozy little restaurants. I would certainly recommend visiting Paris, it is a picturesque city".

Самостоятельная работа № 15. Путешествие на поезде, самолете, объём часов: 2.

Задание:

Ex. 1. Watch the video about ecological ways of travelling. Which transports do you choose to travel. Give arguments.

"What's the greenest way to travel?"

https://www.youtube.com/watch?v=TkXEU5ng8rE

Самостоятельная работа № 16. Великобритания (географическое положение, климат, население; национальные символы; политическое и экономическое устройство, традиции), объём часов: 2.

Задание:

Ex. 1. Fill in the gaps with the following words.

London, population, mountains, surface, Great Britain, capital, rivers, industries

The United Kingdom of Great Britain and Northern Ireland is situated on the British Isles. The British Isles consist of two large islands:
The UK is one of the smallest countries. Its
The of the UK is London. The British Isles are separated from the continent by the North Sea the English Channel. The west coast of Great Britain is washed by the Atlantic Ocean and the Irish Sea. The of the British Isles varies very much. The north of continent is called Highlands. The south which has beautiful valleys is called Lowlands.
The UK is highly developed industrial country (machinery, electronics, textile). Shipbuilding is one of the most important of the country.

The UK is a Constitutional Monarchy with a parliament and the queen as Head of States (Elizabeth II).

Самостоятельная работа № 17. США (географическое положение, климат, население; национальные символы; политическое и экономическое устройство, традиции), объём часов: 2.

Залание:

Ex. 1. Read the text. Translate the paragraph that you found the most interesting into Russian.

Interesting Facts About The United States

By: Clarissa Vanner

The United States of America, the land of the free consists of 50 states. Over 330 million people reside in America making it the third most populous country in the world. The US is also the fourth largest country in the world by total area. This vast country is well known across the world and has a cultural imprint that is driven by technological innovation, popular movies, television, and music.

Discover all the amazing and interesting things America has to offer with these interesting facts.

1. America Is Home To Many Natural Wonders

America is home to many natural wonders of the world. In fact, the United Nations Education, Scientific, and Cultural Organization (UNESCO) have recognized many heritage sites in

America. According to UNESCO, a world heritage site is a place of special cultural or physical significance.

Some examples of the UNESCO world heritage sites in America are the <u>Grand Canyon National Park</u>, the <u>Great Smoky Mountains National Park</u>, <u>Yellowstone National Park</u>, and a few others. Check out the full list of Natural UNESCO World Heritage Sites of the USA.

2. The US Has The 4th Longest River System In The World

Aerial view of the confluence of the Yellowstone and Missouri Rivers in western North Dakota. Arriving at the junction of these two great rivers was a milestone for the Lewis and Clark Expedition in the early 1800's.

The Missouri River is the longest river in North America. The river derives from Montana, located at the base of the Rocky Mountains, and flows for approximately 2, 341 miles (3, 767 kilometers) before it empties into the Mississippi River just north of St. Louis, Missouri. The Missouri River and the Mississippi River combine to create the 4th longest river system in the world.

For thousands of years, many people have depended on the Missouri River. From drinking water to transportation, irrigation, flood control, and now even for the generation of hydroelectric power. As you can see this long body of water has played an important role over the years.

3. The US Has The Largest Economy In The World

The United States has maintained its position of being the world's largest economy since 1871. The economy is so large that the US is often noted as an economic superpower and this is due to the fact that it makes up almost a quarter of the global economy.

The US economy is connected to the country's enormous population, technological innovation, high consumer spending, <u>high average incomes</u>, as well as a moderate unemployment rate.

4. The American Flag Has Had 27 Versions

The first American flag only displayed 13 stripes as well as 13 stars that were arranged in a circle. The stars and stripes represented the 13 colonies that declared independence from Great Britain. While the origins of the first American Flag are unknown, some do believe that is was designed by a New Jersey Congressman, Francis Hopkinson, and sewn by a Philadelphia seamstress, Betsy Ross.

Since the founding of the United States, there have been 27 versions of the American flag. Each new flag represented the addition of new states. Today, the American flag displays 50 stars that represent the 50 states that make up the US.

5. Home To Some of The Best Musical Artist Of All Time

Not only is America a huge country, but their musical impression has made a big impact on the world too. America dominates the music industry as there are so many talented musicians that call America home.

Some of the best musical artists include Frank Sinatra, Elvis Presley, Jimmy Hendrix, Madonna, Whitney Houston, Michael Jackson, Beyonce, and many many more.

Самостоятельная работа № 18. Великобритания и США (крупные города), объём часов: 2.

Задание:

Ex. 1. Read the text about a well-known city in England. Why is it famous? What interesting places are there?

STRATFORD-ON-AVON

Stratford-on-Avon lies at the very heart of England. It attracts people not by its history and connection with William Shakespeare, but also by its wonderful nature and typical English character.

Stratford stands on the river-Avon and is one of the oldest market towns. It preserves its own atmosphere. There are beautiful woods, green fields, a quiet river and lovely houses in it. You will not see modern buildings there. The houses are small and a lot of them are very old. Some of them date back to Shakespeare's time.

Here you will visit Shakespeare's birthplace. It is a museum now. In one room there is a little wooden desk, which he sat at, when he went to school. There is a wonderful garden behind the house. Round the corner there is Grammar school that Shakespeare attended.

Thousands of people from all parts of England and foreign tourists come here on Shakespeare's birthday (23-d April) every year.

Among other sights there is a monument with the statue of the great poet on the top and with characters from his plays round it.

And, of course, you will visit the Royal Shakespeare Theatre, a redbrick building on the banks of the Avon. It is a living memorial to the poet's work. The Royal Shakespeare Company is one of the best known and largest theatre companies in the world, which regularly performs here and in London.

Ex. 2. Read the text about a famous American city. What role does it play in American life? What places of interest are there? Describe any other American or British city of your choice using this text as a model (80–100 words).

WASHINGTON

Washington is the capital of the United States of America. It is one of the most beautiful and unusual cities of the United States. In Washington there is no industry. It is a political, administrative, cultural and educational centre of the country.

Washington is the seat of the US government; Washington's .government buildings include the White House and the Capitol. The White House is the official residence of the US President, where he lives and works. The Capitol is the building where the US Congress meets.

Not far from the Capitol there is the library of Congress, the largest library in the country. It contains more than 13 million books, more than 19 million manuscripts and the personal papers of the US Presidents.

There are some important museums in Washington, where you will see famous paintings and sculptures, the original of the Declaration of Independence, the largest blue diamond in the world, etc.

There are five Universities, several museums and galleries in the capital. You will not find a park or a square in the city without a monument or a memorial. The most impressive and the best known monuments are the Lincoln Memorial and the Washington Monument.

There are no sky-scrapers in Washington. There is a law that forbids building houses higher than the Capitol. Thousands of tourists visit Washington every day.

Самостоятельная работа № 19. Географическое положение. Климат. Население, объём часов: 2.

Залание:

Ex. 1. Read and translate the text.

Russia

Russia, the largest country in the world, occupies one-tenth of all the land on Earth.

FAST FACTS

OFFICIAL NAME: Russian Federation

FORM OF GOVERNMENT: Federation

CAPITAL: Moscow

POPULATION: 142,122,776

OFFICIAL LANGUAGE: Russian

MONEY: Ruble

AREA: 6,592,772 square miles (17,075,200 square kilometers)

MAJOR MOUNTAIN RANGES: Ural, Altay

MAJOR RIVERS: Amur, Irtysh, Lena, Ob, Volga, Yenisey

GEOGRAPHY

Russia, the largest country in the world, occupies one-tenth of all the land on Earth. It spans 11 time zones across two continents (Europe and Asia) and has coasts on three oceans (the Atlantic, Pacific, and Arctic).

The Russian landscape varies from desert to frozen coastline, tall mountains to giant marshes. Much of Russia is made up of rolling, treeless plains called steppes. Siberia, which occupies three-quarters of Russia, is dominated by sprawling pine forests called taigas.

Russia has about 100,000 rivers, including some of the longest and most powerful in the world. It also has many lakes, including Europe's two largest: Ladoga and Onega. Lake Baikal in Siberia contains more water than any other lake on Earth.

Source: https://kids.nationalgeographic.com/geography/countries/article/russia

Самостоятельная работа № 20. Национальные символы. Политическое и экономическое устройство, объём часов: 2.

Задание:

Ex. 1. Read the text. Draw a scheme of the political system of Russia.

The political system of the Russian Federation

The Constitution of the Russian Federation establishes the principle of separation of powers. Article 10 of the Constitution provides that state power in Russia is exercised on the basis of separation into legislative, executive and judicial branches, which are independent of each other

State power is exercised by the following bodies: the President, the Federal Assembly (the State Duma and the Federation Council), the Government and the courts. State power in the regions of the Russian Federation is exercised by regional state authorities.

Local self-government is not part of the system of state authorities, they are independent within their powers.

President of the Russian Federation

The President of the Russian Federation is the Head of State. He (she) is the guarantor of the Constitution of the Russian Federation and of human and civil rights and freedoms, he (she) adopts measures to protect the sovereignty of the Russian Federation, its independence and State integrity, and ensures the coordinated functioning and interaction of State government bodies. The President of the Russian Federation determines the basic objectives of the internal and foreign policy of the State and represents the Russian Federation within the country and in international relations. The President is the Supreme Commander-in-Chief of the Armed Forces of the Russian Federation.

The President is elected for six years by citizens of the Russian Federation. Any Russian citizen not younger than 35 years who has resided in the Russian Federation on a permanent basis for not less than 10 years may be elected President.

The President may be impeached by the Federation Council only on the basis of charges of high treason or of another grave crime brought by the State Duma.

Federal districts

In order to increase the effectiveness of the activities of the federal government bodies and to improve the system of control over the execution of their decisions, federal districts, to which the President appoints his (her) Plenipotentiaries, were created in 2000.

Federal districts are not regions or another constitutional part of the administrative-territorial division of the Russian Federation.

Plenipotentiaries of the President are not district's governors or chiefs of the heads of constituent entities (regions) of the district and they are just representatives of the President and members of the Presidential Administration. Plenipotentiaries of the President have no constitutional powers.

Executive power

Executive power is exercised by the Government of the Russian Federation. The Chairman (Prime Minister) is appointed by the President with the consent of the State Duma. In the event that the State Duma rejects the candidates for the post of Chairman of the Government three times, the President appoints the Chairman of the Government, dissolves the State Duma and announces new elections.

The Government consists of the Chairman of the Government of the Russian Federation, deputy chairmen and federal ministers. The Government heads the system of federal executive bodies: ministries, federal services and federal agencies. However, there are ministries, federal agencies and services that report directly to the President, for example, the Ministry of Internal Affairs, the Ministry of Emergency Situations, the Ministry of Foreign Affairs, the Ministry of Defense, etc.

Local Self-government

Local self-government in the Russian Federation provides for the independent resolution by the population of issues of local importance, and the possession, use and management of municipal property. It is exercised by citizens by means of referendum, elections and other forms of direct expression of their will, and through elected and other bodies of local self-government.

Source: http://duma.gov.ru/en/news/28748/

Самостоятельная работа № 21. Москва— столица России. Достопримечательности Москвы, объём часов: 2.

Задание:

Ex. 1. Look through the webpage with advice on what places to visit in Moscow. Which of these places would you like to visit? Explain your choice.

"Points of Interest & Landmarks in Moscow"

https://www.tripadvisor.com/Attractions-g298484-Activities-c47-t163-Moscow_Central_Russia.html

Самостоятельная работа № 22. Традиции народов России, объём часов: 2.

Задание:

Ex. 1. Watch the video and write down the major cultural customs and traditions mentioned there. What other customs and traditions can you add to this list?

"Russia; The Land of Diversity"

https://www.youtube.com/watch?v=zjNGHHjGrRc

Самостоятельная работа № 24. Основные понятия вашей профессии. Особенности подготовки и деятельности по профессии/специальности, объём часов: 2.

Задание:

Ex. 1. Read the text. Write down and translate the main professional terms that you find in the text.

Exploring of Oil and Gas

Earth scientists in the petroleum industry – including geologists, geophysicists, geochemists and paleontologists - study what has happened to rocks that may be buried thousands of meters below surface, how those rocks were formed and affected by events stretching back millions of years, and how to identify traps where oil and gas accumulated within rock formations.

An explorer may have a well-developed theory or intuition why an area should contain oil and gas. A first-hand look at outcrop geology and surface features sometimes helps to confirm

the basic requirements - that there may be sedimentary rocks, potential reservoirs and hydrocarbon-bearing source rocks in a sedimentary basin.

Within a basin, the explorer's first step is to examine all the information already known about the area. This might include academic papers, surface geology observations, any wells drilled, data from relevant agencies or departments and previous exploration results from nearby or similar areas. Geophysicists can identify the structure, configuration, thickness and depth of new sedimentary basins by measuring slight variations in the Earth's gravitational and magnetic fields and by measuring the time taken for seismic energy waves to pass through and be reflected from sedimentary layers.

In a typical trap, gas accumulates on the top of the reservoir as a "gas cap" over the oil, which in turn overlies the water-saturated zone in the reservoir. This occurs because natural gas is lighter than oil which is lighter than water. However, all three fluids are often intermingled in parts of the reservoir. Porosity is the ability of rock to hold oil and gas like water in a sponge. A trap requires three elements:

- A porous reservoir rock to accumulate the oil and gas- typically sandstones, limestones and dolomites
 - An overlaying impermeable rock to prevent oil and gas from escaping
 - A source for the oil and gas, typically black waxy shales.

There are 6 common oil and gas traps: 1) thrust fault; 2) normal fault; 3) stratigraphic pinch-out; 4) reef; 5) anticlines; 6) salt dome.

If it is impossible to obtain the geophysical data from regulatory bodies, the seismic survey is required. In a seismic survey it is necessary to lay out a line or several lines of sensitive receivers, called geophones or jugs, on the ground. Then explosions or mechanical vibrations are created on the surface. The geophones record the energy reflected back as seismic waves from rock layers at various depths. Geophysicists and geologists examine the seismic data for the presence of suitable traps and for similarities with other petroleum-producing areas. If the results seem promising, they use the seismic data to pinpoint where to drill a well.

Самостоятельная работа № 25. Специфика работы и основные принципы деятельности по профессии/специальности, объём часов: 2.

Задание:

Ex. 1. Read the text. Translate the words and phrases in bold. Use them to write sentences of your own.

Top 10 Jobs in 2030: Skills You Need Now to Land the Jobs of the Future

By 2025, we'll lose over five million jobs to **automation**. However, there will also be **a vast array of new jobs available** to **university graduates** - mostly related to **knowledge** creation and **innovation**.

While **advancements in machinery and technology** may combine to provide graduates with the tools to explore, experiment and find interesting solutions to complex problems, they will also open up a world of new **career opportunities**.

So what are these jobs of the future, and what **areas of study** will monopolise the **career market** of the 2020-2050s?

According to Crimson Education South Africa Country Manager, Rebecca Pretorius, students can **future-proof** their careers with **qualifications in science, technology, engineering and mathematics** (STEM).

Quoted in a <u>Business Tech Article</u>, Rebecca suggests that: "Students need to consider **choosing** a **field of study** that is 'future proof' after graduation. **STEM job opportunities** are being created at a much faster rate than students can graduate **to fill** them."

Of course, **humanities** students should not abandon their love for **the arts**, as key to a student's future success and happiness is the pursuit of a career they **enjoy**. In fact, five of the **key skills** for future employment involve the use of key **human skills** such as:

- Mental Elasticity and Complex Problem Solving
- Critical Thinking
- Creativity and
- People Skills
- Interdisciplinary Knowledge

Looking at the latest list of **prospective** new jobs of 2050, we can see where the global career market may be headed. Take a look at a list of five possible jobs of the future.

Commercial Space Pilot

With SpaceX advancing space travel faster than we could imagine a decade ago, it could be time for potential pilots to reach beyond the skies.

Extinct species revivalist

Today's zoologists **could play a critical role** in recreating species that have already become extinct by reintegrating the newly recreated species into the natural environments of their extinct predecessors.

Alternative Energy Consultant

It is a well-known scientific fact that the earth's population cannot survive on fossil fuel forever, so alternative energy sources are **at the forefront** of energy science and research. An Alternative Energy Consultant would be **a universal expert** on all alternative energy sources including solar, hydro, nuclear energy and more.

Organ/Body Part Creator

Every 12 minutes a new name gets added onto the already long waiting list for organ donors. New progress in stem cell research means 3D-printing could well be used to grow organs on demand.

Mind Transfer Specialist/Memory Surgeon

With advancements in neuroscience and technology it might be possible to upload a human mind to a computer. Specialised computer chips could provide benefits such as telepathy, enhanced memory and paralysis treatments. Further, Memory Surgeons may be able to remove negative memories to treat depression and other psychological illnesses.

Although a lot of the jobs that exist today will be automated by 2030, you should be **excited about the future**, not **scared of** it.

However, you shouldn't **limit yourself** to the jobs on this list. Dream up your own list of **potential** future careers that use the **essential** skills outlined earlier.

Source: https://www.crimsoneducation.org/ie/blog/jobs-of-the-future

Самостоятельная работа № 26. Природные и физические явления, объём часов: 2.

Задание:

Ex. 1. Read and translate the text.

The Well

The well is a hole drilled in the earth for the purpose of finding or producing crude oil or natural gas; or providing services related to the production of crude oil or natural gas. Also, an oil well can be described as a pipeline reaching from the top of the ground to the oil producing formation. Through this pipe, oil and gas are brought to the surface. Wells are normally drilled with a drilling rig in stages, starting with a surface hole drilled to reach a depth anywhere from 60 to 400 meters.

The drillers then pull out the drill string and insert steel pipe, called surface casing, which is cemented in place to keep the wall from caving in. The casing – tubular steel pipe connected by threads and couplings-lines the total length of the well bore1 to ensure safe control of production and to prevent water entering the wellbore and to keep the rock formations from "sloughing" into the wellbore. The second step is the installation of the production tubing. Tubing is a steel pipe smaller in diameter than the production casing. It is lowered into the casing and held in place by packers which also isolate the production layers of rock.

Tubing

The tubing hangs from a surface installation called the wellhead. The wellhead includes valves, chokes and pressure gages and makes it possible to regulate production from the well. The third step is to perforate the well. The casing prevents the hole from collapsing, but it also prevents the oil or gas from entering the wellbore. Therefore, holes are made through the casing and into the formation. This is usually accomplished with an explosive device that is lowered into the well on an electrical wireline to the required depth. This device, a collection of explosive charges, is called a perforating gun.

Самостоятельная работа № 27. Экономические и социальные проблемы, объём часов: 2.

Задание:

Ex. Read and retell the text. What are the main functions of management in business companies? How can managers motivate employees?

Management and human resources development

Managers perform various functions, but one of the most important and least understood aspects of their job is proper utilization of people. Research reveals that worker performance is closely related to motivation; thus keeping employees motivated is an essential component of good management. In a business context, motivation refer to the stimulus that direct the behavior of workers toward the company goals. In order to motivate workers to achieve company goals, managers must be aware of their needs.

Many managers believe workers will be motivated to achieve organizational goals by satisfying their fundamental need for material survival. These needs include a good salary, safe working conditions, and job security. While absence of these factors results in poor moral and dissatisfaction, studies have shown that their presence results only in maintenance of existing attitudes and work performance. Although important, salary working conditions, and job security don't provide the primary motivation for many workers in highly industrialized societies, especially at the professional or technical levels.

Increased motivation is more likely to occur when work meets the needs of individuals for learning, self-realization, and personal growth. By responding to personal needs – the desire for responsibility, recognition, growth, promotion, and more interesting work – managers have altered condition in the workplace and consequently, many employees are motivated to perform more effectively.

In an attempt to both the fundamental or personal needs of workers, innovative management approaches, such as job enrichment and job enlargement, have been adopted in many organizations. Job enrichment gives workers authority in making decision related to planning and doing their work. A worker might assume responsibility for scheduling work-flow, checking quality of work produced, or making sure deadlines are met. Job enlargement increases the number of tasks workers perform by allowing them to rotate positions or by giving them responsibility for doing several job. Rather than assembling just the component of a automobile, factory workers might be grouped together and given responsibility for assembling the entire fuel system.

By improving the quality of work life through satisfaction of fundamental and personal employee needs, managers attempt to direct the behaviour of toward the company goal.

Самостоятельная работа № 28. 28. Экологические проблемы, объём часов: 2.

Задание:

Ex. 1. Read the text and do the True / False / Not stated test below.

Litter is a Problem in Our Cities

Litter is garbage – like food, paper and cans – on the ground or in the street. Where many people live together, litter is a problem. People don't always put their garbage in the bins. It's easier to drop a paper than to find a bin for it. But litter is ugly. It makes the city look dirty, and it spoils the view.

The wind blows papers far away. Often they are difficult to catch. When they blow against a fence, they stay there. This fence is a wall of garbage.

Litter is a health problem, too. Food and garbage attract animals, which sometimes carry disease.

Some people want to control litter. They never throw litter themselves, and sometimes they work together in groups to clean up the city. In most places litter is against the law. The law punishes people who throw garbage in the streets. They usually pay a fine, and occasionally they go to jail.

Two famous sayings in the United States are: "Don't be a litterbug!" and "Every litter bit hurts!"

- 1) Litter is a problem among people.
 - a) true
- b) false
- c) not stated
- 2) Garbage makes our cities look awful.
 - a) true
- b) false
- c) not stated
- 3) There are special bins for different garbage in the streets.
 - a) true
- b) false
- c) not stated
- 4) Papers are easy to catch.
 - a) true
- b) false
- c) not stated
- 5) Garbage attracts sick animals.
 - a) true
- b) false
- c) not stated
- 6) People don't care about litter.
 - a) true
- b) false
- c) not stated
- 7) Groups that clean litter are in every city.
 - a) true
- b) false
- c) not stated
- 8) There are no antipollution laws.
 - a) true
- b) false
- c) not stated
- 9) In some countries people are punished for dropping litter.
 - a) true
- b) false
- c) not stated
- 10) The saying "Don't be a litterbug!" asks you not to drop litter in the streets.
 - a) true
- b) false
- c) not stated

ANSWER KEY:

1a, 2a, 3c, 4b, 5a, 6c, 7c, 8b, 9a, 10a

Самостоятельная работа № 29. Достижения науки, объём часов: 2.

Задание:

Ex. 1. Read the text. Do you agree with the author's suggestions? What scientific discovery of the last 10 years do you think is the most important?

New Scientist ranks the top 10 discoveries of the decade

The 2010s saw huge advancements across science and technology. Relive the best moments with our definitive ranking of the decade

18 December 2019

The 2010s saw huge leaps in physics, genetics, archaeology and technology. Here is our pick of the best

1. Higgs boson

It took four years, thousands of people and the world's biggest machine, but, in 2012, particle physicists at CERN announced the discovery of the Higgs boson. The particle helps explain why all other particles in the universe have mass, and its discovery completed the standard model of particle physics.

2. CRISPR

The full potential of genetic engineering was unlocked in 2012 with the cheap and easy <u>CRISPR</u> <u>system for editing DNA</u>. Its use has since exploded, unfortunately including the widely condemned creation of the first gene-edited babies in China in 2018.

3. Gravitational waves

In 1916, Albert Einstein predicted that space-time – the fabric of the universe – was disturbed by strange ripples known as gravitational waves. Exactly a century later, the Laser Interferometer Gravitational-Wave Observatory collaboration announced that it had finally spotted these waves emanating from a pair of merging black holes.

4. AlphaGo

The decade has been dominated by advances in artificial intelligence, but the pinnacle of machine achievement was <u>AlphaGo</u>. The software developed by DeepMind beat leading player Lee Sedol at the board game Go in a stunning 4-1 match in 2016.

5. Layla's gene therapy

In 2015, a 1-year-old girl received a cancer treatment unlike any other. Doctors at Great Ormond Street Hospital in London gave baby Layla immune cells from a donor that they had genetically modified to destroy the cells causing

her leukaemia, saving her life.

6. Denisovans

Researchers announced the discovery of a human finger bone that is genetically distinct both from modern humans and Neanderthals in 2010, complicating our ancestral story. They named this new species the Denisovans, after Denisova cave in Siberia, Russia, where the bone was found. Later discoveries in the cave included more remains of these mysterious people, including the 2018 announcement of a hybrid with a Neanderthal mother and a Denisovan father. Genetic analyses have also revealed that there are people today carrying some Denisovan DNA.

7. Quantum supremacy

Efforts to develop quantum computers gradually ramped up this decade, culminating with Google's <u>announcement of quantum supremacy</u> in 2019. The firm developed the first quantum computer capable of performing a calculation that no classical supercomputer on Earth can match.

8. Proxima Centauri b

When the decade began, we knew of about 450 planets beyond our solar system. Now, that number has bloomed to <u>more than 4000</u>. Most significant of all was <u>the discovery of Proxima</u> Centauri b in 2016, the closest known exoplanet, at a distance of 4.2 light years from Earth.

9. Face transplants

The <u>first full transplant</u> took place in 2010. In a 24-hour operation, a Spanish farmer who had accidentally shot himself had the remains of his face removed, leaving just his eyeballs and tongue. The rest was replaced by the entire face of a dead donor.

10. Richard III

A car park in Leicester, UK, hosted a scene worthy of Shakespeare. In 2012, a team of geneticists and historians announced they had <u>excavated the remains of Richard III</u>, former king of England. The skeleton showed signs of spinal curvature and <u>DNA evidence</u> from his descendants supported the find.

Source: https://www.newscientist.com/article/mg24432613-200-new-scientist-ranks-the-top-10-discoveries-of-the-decade/

Самостоятельная работа № 30. Современные информационные технологии. ИКТ в профессиональной деятельности, объём часов: 2.

Задание:

Ex. 1. Read and retell the text. Express your opinion.

Computers in Modern Life: Convenience or Stress?

Some people have a strong belief that computers are a crucial achievement Lack of time. They make contemporary life much more convenient and exciting. However, there is also another opinion that computing devices and IT technologies bring much stress in routine and make life more complicated. My point of view is that computers really make people feel under pressure. However, benefits that come from clever machines are obvious in all spheres of life. Nearly all people like comfort and modern conveniences and can hardly imagine their life without them.

All processes in business and private spheres have been immensely computerized for the last ten years. Machines control accountancy, payments, reporting, production and trading activities, etc. Everybody knows that time is one of the most valuable resources ("Time is money"). Thus, companies widely use computers to optimize all activities and plan outputs. This leads to the intensification of the work, which inadvertently puts employees into a state of complete exhaustion. Lack of time for rest and recreation may lead to stress and even nervous breakdown.

Moreover, mobile information technologies and broad Internet coverage make people reachable in any place and any hour of the day. In some cases, they have to answer emails and messages while staying with family, going shopping or doing sports. It may cause quarrels, misunderstandings and tiredness, which are extremely stressful.

However, there is no doubt that intellectual machines and their derivatives are very useful. A big amount of data can be stored in electronic format with their help. Thus, documents, presentations, reports, books, computer games, songs and movies do not need any paper, packages, shelves devices and special premises. A tiny gadget is an indispensable thing for travelling and business trips. Moreover, cloud technologies make it possible to store and manage millions of documents in a very efficient way. Traditional businesses are getting more virtualized and their profitability and safety steady increase.

Furthermore, social networks, charts and messengers provide quick communication and files exchange all over the world. Internet users have many possibilities for finding friends and partners. They share their ideas through blogs, speak and see each other with the help of video chats and create business platforms to make money. Virtual world is the progress and development needed for humanity.

In addition, people become accustomed to making purchases of goods and services with the help of computers. They buy gadgets, and clothes in the internet shops, reserve hotels and book tickets on the specialized websites, receive money for doing some job on the internet platforms. All that can be done at home from a desktop computer or in a café from a smartphone, iPad or tablet. All these gadgets are affordable for a big number of people on the planet. Internet services are mainly unified and easy for use.

Finally, mobile applications offer such interactive services as a virtual secretary, navigator, and voice translator. They are helpful in getting the necessary information in real time. Tourists can easily find a location of the nearest restaurant, shopping center or museum on the interactive map. They can also follow their way using the on-line navigator. Simple phrases immediately translated in a language of the visited country may be crucial in avoiding misunderstandings. Voice reminders that come from a smartphone make life more organized and safe.

To sum up, computers make people's life tense and hectic. Time for rest is reduced whereas control is strengthened. However, computers and IT applications provide global communication, advanced business opportunities and an immediate access to information. Modern world cannot be efficient without all these conveniences.

Самостоятельная работа № 31. Известные ученые и их открытия в России, объём часов: 2.

Задание:

Ex. 1. Read the text about famous Russian scientists. Write a small report about a Russian scientist or scholar that you admire. Use the text below as a model.

Famous Russian Scientists

Sergei Korolev (1907-1966): The Father of Practical Astronautics

What makes Sergei Korolev famous?

Sergei Korolev was born in the Russian Empire in 1906. He was an influential Soviet engineer during the Space Race between the Soviet Union and the US.

Korolev played a key role in the design and development of the Soviet Union's missiles and artificial satellites. His work made it possible for Yuri Gagarin to become the first person to go to space.

Korolev possessed unparalleled design integration and strategic planning skills. This is evident throughout his career. He won many honors and awards, including the Order of Lenin, which he won three times.

[Source: Encyclopedia Britannica]

Mikhail Lomonosov (1711-1765): The Founder of Geology

What makes Mikhail Lomonosov famous?

Mikhail Lomonosov was born in the Russian Empire on November 19, 1711. He is famous for his contributions to science, literature, and education.

This Russian polymath specialized in mineralogy, chemistry, natural science, physics, and more. He discovered the atmosphere of Venus and the concept of conservation of mass in chemistry.

Lomonosov was one of the poets who revolutionized Russian literature. His efforts influenced the establishment of the Russian literary language.

[Source: Encyclopedia Britannica]

Andrey Kolmogorov (1903-1987): The Pioneering Mathematician

What makes Andrey Kolmogorov famous?

Andrey Kolmogorov was born in Tambov on April 25, 1903. He lost his mother, Maria Kolmogorova, at birth.

At a young age, Kolmogorov became known for his math talents. He started contributing to his school's journal, "The Swallow of Spring," at the age of five.

Andrey Kolmogorov is recognized as a great mathematician for his contributions to algorithmic information theory, computational complexity, topology, and probability theory, among others.

He received many honors and awards for his outstanding contribution to mathematics. The awards included the Wolf Prize, the Lenin Prize, and the Lobachevsky Prize.

[Source: Encyclopedia Britannica]

Vladimir Vernadsky (1863-1945): One of The Founders of Biogeochemistry and Radiogeology

What makes Vladimir Vernadsky famous?

Vladimir Vernadsky was a Soviet scientist born in Saint Petersburg on February 28, 1863. He is known for his work on biogeochemistry, geochemistry, and radiogeology.

Although Vernadsky was considered a Ukrainian scientist, he didn't accept Ukrainian citizenship in 1918.

Vladimir Vernadsky is most famous for his book, The Biosphere, which popularized the term biosphere. Eduard Suess coined this term in 1885 to explain life on Earth.

[Source: Encyclopedia Britannica]

Leonid Kantorovich (1912-1986): The Founder of Linear Programming

What makes Leonid Kantorovich famous?

Leonid Kantorovich is best known for his contributions to economics and mathematics. He is recognized for developing techniques that address the allocation of resources. Kantorovich also pioneered linear programming in mathematics.

He was born on January 12, 1912 in Saint Petersburg, Russia. For his work, Leonid Kantorovich received the prestigious Nobel Memorial Prize in Economics and the Stalin Prize.

[Source: Encyclopedia Britannica]

Aleksandr Borodin (1833-1887): The Artist Who Made A Name For Himself in Science

What makes Alexsandr Borodin famous?

Alexsandr Borodin was born in St. Petersburg, Russia. He was an accomplished composer, although his primary focus was scientific research.

Borodin worked as a chemist, where his research in organic synthesis revolutionized the subject. His first major contribution to the field came when he demonstrated nucleophilic substitution. He is credited with being one of the first organic synthesists to demonstrate nucleophilic substitution reactions in organic chemistry.

[Source: Encyclopedia Britannica]

Vladimir Demikhov (1916-1998): The Father of Organ Transplantation

What makes Vladimir Demikhov famous?

Vladimir Demikhov was a Russian scientist known for pioneering organ transplantation, which is the process of replacing damaged or diseased organs with healthy ones from another individual.

Demikhov transplanted a second head onto a dog—an unprecedented feat at the time. This experiment revolutionized medicine.

[Source: National Library of Medicine]

Source: https://www.scijournal.org/articles/famous-russian-scientists

Самостоятельная работа № 32. Известные ученые и их открытия за рубежом, объём часов: 2.

Задание:

Ex. 1. Read and retell the text about a famous scientist and inventor. Do exercises after the texts.

James Watt

James Watt was a Scottish inventor and mechanical engineer, known for his improvements of the steam engine.

Watt was born on January 19, 1736, in Greenock, Scotland. He worked as a mathematical-instrument maker from the age of nineteen and soon became interested in improving the steam engine which was used at that time to pump out water from mines.

Watt determined the properties of steam, especially the relation of its density to its temperature and pressure, and designed a separate condensing chamber for the steam engine that prevented large losses of steam in the cylinder. Watt's first patent, in 1769, covered this device and other improvements on steam engine.

At that time, Watt was the partner of the inventor John Roebuck, who had financed his researches. In 1775, however, Roebuck's interest was taken over by the manufacturer Matthew Boulton, owner of the Soho Engineering Works at Birmingham, and he and Watt began the manufacture of steam engines. Watt continued his research and patented several other important inventions, including the rotary engine for driving various types of machinery; the double-action engine, in which steam is admitted alternately into both ends of the cylinder; and the steam indicator, which records the steam pressure in the engine. He retired from the firm in 1800 and thereafter devoted himself entirely to research work.

The misconception that Watt was the actual inventor of the steam engine arose from the fundamental nature of his contributions to its development. The centrifugal or flyball governor, which he invented in 1788, and which automatically regulated the speed of an engine, is of particular interest today. It embodies the feedback principle of servomechanism, linking output to input, which is the basic concept of automation. The **watt**, the unit of power, was named in his honor. Watt was a well-known civil engineer. He invented, in 1767, an attachment that adapted telescopes for use in the measurement of distances. Watt died in Heathfield, near Birmingham, in August 1819.

Answer the questions

- 1. Who was James Watt?
- 2. When did he become interested in improving the steam engine?
- 3. What properties of steam did Watt determine?
- 4. What did he design after that?
- 5. When and where did J. Watt and his partner begin the manufacture of steam engines?
- 6. Can you name several important Watt's inventions?
- 7. Was Watt the actual inventor of the steam engine?
- 8. What is the necessity of the flyball governor invented by Watt in 1788 nowadays?
- 7. What does "the watt" mean?

Circle the correct word in the sentence

- 1. James Watt was a Scottish / a French inventor and mechanical engineer.
- 2. At the age of nineteen Watt became interested in improving the vacuume cleaner / the steam engine.

- 3. Watt determined the relation of the steam weight / density to its temperature and pressure.
- 4. In 1769 J.Watt worked with the inventor / the traveler J.Roebuck, who had financed his researches.
- 5. Later James Watt patented his invention of the rotary engine for controlling driving various types of manufacturing / machinery.
- 6. The flyball governor invented by Watt is automatically regulate the speed of an engine / a telescope.

3. ОРГАНИЗАЦИЯ КОНТРОЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ

Результаты самостоятельной работы

Оценки за выполнение заданий могут выставляться по пятибалльной системе или в форме зачета и учитываться как показатели текущей успеваемости обучающихся.

Качественная оценка индивидуальных образовательных достижений		Критерии оценки результата
балл (оценка)	вербальный аналог	
5	отлично	Представленные работы высокого качества, уровень выполнения отвечает всем требованиям, теоретическое содержание курса освоено полностью, без пробелов, необходимые практические навыки работы с освоенным материалом сформированы, выполнены все предусмотренные программой обучения задания.
4	хорошо	Уровень выполнения работы отвечает всем требованиям, теоретическое содержание курса освоено полностью без пробелов, некоторые практические навыки работы с освоенным материалом сформированы недостаточно, все предусмотренные программой обучения задания выполнены, некоторые из выполненых заданий, возможно, содержат ошибки.
3	удовлетворительно	Уровень выполнения работы отвечает большинству основных требований, теоретическое содержание курса освоено частично, но пробелы не носят существенного характера, необходимые практические навыки работы с освоенным материалом в основном сформированы, большинство предусмотренных программой обучения заданий выполнено, некоторые виды заданий выполнены с ошибками.
2	не удовлетворительно	Теоретическое содержание курса освоено частично, необходимые практические навыки работы не сформированы, большинство предусмотренных программой обучения заданий не выполнено.

4. ИНФОРМАЦИОННОЕ ОБЕСПЕЧЕНИЕ ОБУЧЕНИЯ

Информационное обеспечение обучения

- 1. Английский язык для гуманитариев (B1–B2). English for Humanities: учебное пособие для вузов / О. Н. Стогниева, А. В. Бакулев, Г. А. Павловская, Е. М. Муковникова. Москва: Издательство Юрайт, 2022. 178 с. (Высшее образование). ISBN 978-5-534-14982-1. Текст: электронный // Образовательная платформа Юрайт [сайт]. URL: https://urait.ru/bcode/494395
- 2. Английский язык для академических целей. English for Academic Purposes: учебное пособие для вузов / Т. А. Барановская, А. В. Захарова, Т. Б. Поспелова, Ю. А. Суворова; под редакцией Т. А. Барановской. 2-е изд., перераб. и доп. Москва: Издательство Юрайт, 2022. 220 с. (Высшее образование). ISBN 978-5-534-13839-9. Текст: электронный // Образовательная платформа Юрайт [сайт]. URL: https://urait.ru/bcode/489787

Дополнительные источники

- 1. Онлайн-словари ABBYY Lingvo. URL:http://www.abbyyonline.ru (дата обращения: 11.02.2022). Текст: электронный.
- 2. Онлайн-словари Мультитран». URL:http://www.multitran.ru (дата обращения: 11.02.2022). Текст: электронный.