

**Kazan State University
of Architecture and Building Construction**

Department of Foreign Languages

English for Architects



Kazan
2014

**МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ
РОССИЙСКОЙ ФЕДЕРАЦИИ**

**КАЗАНСКИЙ ГОСУДАРСТВЕННЫЙ АРХИТЕКТУРНО СТРОИТЕЛЬНЫЙ
УНИВЕРСИТЕТ**

Кафедра иностранных языков

English for Architects

Методические указания
для студентов-бакалавров 1-го курса дневного отделения
направлений 270100.62 «Архитектура», 270200.62 «Реставрация и
реконструкция архитектурного наследия», 270300.62 «Дизайн
архитектурной среды»

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English for Architects:

Методические указания для студентов-бакалавров 1-го курса дневного отделения направлений 270100.62 «Архитектура», 270200.62 «Реставрация и реконструкция архитектурного наследия», 270300.62 «Дизайн архитектурной среды» / Сост. М.К.Гулкян, Р.К. Ахметгареева, А.А.Хафизова - Казань:Изд-во Казанск.гос.архитект.-строит.ун-та, 2014. – 43с.

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English for Architects:

Методические указания на английском языке «English for Architects» составлены в соответствии с требованиями программы, определенной Государственным образовательным стандартом.

Методические указания предназначены для студентов – бакалавров 1-го курса направлений 270100.62«Архитектура», 270200.62 «Реставрация и реконструкция архитектурного наследия», 270300.62 «Дизайн архитектурной среды», обучающихся на дневной форме обучения неязыковых вузов.

Основной целью данных методических указаний является выработать у студентов умение использовать языковой материал по теме в диалогической и монологической речи.

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Kazan State University of Architecture and Building Construction

Part I

Vocabulary

- | | |
|---|--|
| 1. Kazan State University of Architecture and Building Construction | 1. Казанский государственный архитектурно-строительный университет |
| 2. University campus | 2. университетский городок |
| 3. underground crossing | 3. подземный переход |
| 4. covered bridge | 4. крытый переход |
| 5. purpose-built workshop | 5. специализированная мастерская |
| 6. purpose-built building | 6. здание предназначенное для |
| 7. well-equipped laboratory | 7. хорошо оборудованная лаборатория |
| 8. to establish | 8. основывать, устанавливать |
| 9. site | 9. площадка, строительная площадка |
| 10. to link (connect) | 10. соединять |
| 11. to get a start in life | 11. получить путевку в жизнь |
| 12. to imagine | 12. представить, вообразить |
| 13. to create | 13. творить, создавать |
| 15. economic prosperity | 15. экономическое процветание |
| 16. forge of highly qualified specialists | 16. кузница высококвалифицированных специалистов |

17.	academic building	17.	учебное здание
18.	refectory and cafe building	18.	здание столовой и кафе
19.	students' health center	19.	студенческий профилакторий
20.	students' residence	20.	студенческое общежитие
21.	to have at one's disposal	21.	иметь в чьём - то распоряжении

1. Read and translate the text.

Text

Kazan State University of Architecture and Building Construction is one of the best and prestigious higher schools in Russia.

Our University was established in 1930. It's even difficult to imagine how many young people have got a start in life and how much they have done and created for the economic prosperity of our Republic of Tatarstan.

Our higher school is widely known as a large scientific center and a forge of highly qualified specialists for construction industry. There are members of the Academy of Sciences, doctors and candidates of sciences, professors, and assistant professors in our University.

The University is a real University campus on the site of more than 35 sq.km. There are 5 large academic buildings next to each other and linked by underground crossing and a covered bridge, the sports complex, including a gym-hall building with a sport ground and a tennis court. There are also some purpose-built workshops and well-equipped laboratories, a refectory and café building on the site of the University campus.

The complex of 3 students' residences for more than 1000 students, situated not far from the academic buildings, contains the students' health centre provided with up-to-date medical equipment.

So our University has at its disposal educational and laboratory base, a library with 4 reading halls, 3 residences, 3 gym-halls, a sports ground, a tennis court, a sports camp on the Mersha river, a refectory, a café and student's health centre.

Our University is located in Zelenaya St. close to the city centre, within easy reach to the city libraries, art galleries, the Big Concert Hall, theatres, cinemas and the Sports Centre. In addition to the refectory and cafe building there are pubs, bars to eat and to have a good rest close to the University in Vishnevskiy St.

2. Answer the following questions.

1. What are you? What higher school do you study at?
2. When was our University established?
3. What higher school is our University nowadays?
4. Why can we call our University a real University campus?
5. Where is the University located?
6. What led you to the decision to enter the University of Architecture and Building Construction?

Part II
Institutes. Departments. Courses.

Vocabulary

- | | |
|---|--|
| 1. to register | 1. регистрировать, вносить в список, здесь: насчитывать |
| 2. full-time students | 2. студенты дневного отделения |
| 3. extra-mural (correspondence-course) students | 3. студенты заочного отделения |
| 4. post-graduate courses | 4. аспирантура |
| 5. post-graduate (student) | 5. Аспирант |
| 6. authoritative profession | 6. авторитетная профессия |
| 7. Institute of Architecture and Design | 7. Институт архитектуры и дизайна |
| 8. Institute of Transport Structures | 8. Институт транспортных сооружений |
| 9. Institute of Economics and Business Management in Construction | 9. Институт экономики и управления в строительстве |
| 10. Institute of Qualification Improvement | 10. Институт повышения квалификации |
| 11. department of general architecture and art education | 11. факультет общей архитектурно-художественной подготовки (ИТС) |
| 12. department of architecture | 12. архитектурный факультет |

13. department of design	13. факультет дизайна
14. department of general engineering training	14. факультет общей инженерной подготовки (ИТС)
15. department of building construction	15. строительный факультет
16. department of building materials production technology	16. строительно-технологический факультет
17. department of engineering systems and ecology	17. факультет инженерных систем и экологии
18. department of highway construction	18. автодорожный строительный факультет
19. department of road safety organization	19. факультет организации дорожной безопасности
20. correspondence engineering department	20. заочный инженерный факультет
21. correspondence department of economics and business management in construction	21. заочный факультет экономики и управления производством в строительстве, (Sunday and distance education - воскресное и дистанционное образование)
22. correspondence department of highway construction	22. автодорожный заочный факультет
23. the center of humanitarian education	23. центр гуманитарного образования

24. Children's School of Architecture	24. детская архитектурная школа
25. innovating degree course	25. новый курс с присвоением степени
26. Bachelor of Sciences	26. бакалавр наук
27. Master of Sciences	27. магистр наук
28. tutorial	28. практическое занятие, консультация
29. field trip	29. полевая практика
30. to allocate to practice	30. выделять на практику
31. business management	31. руководство производством
32. examination and valuation of real estate	32. экспертиза и оценка недвижимости
33. to acquire knowledge	33. овладевать знанием
34. civil and industrial construction	34. гражданское и промышленное строительство.
35. engineering systems	35. строительные системы (методы)
36. ecology environment conservation	36. защита экологии
37. process of building materials and structures production	37. технология производства строительных материалов и конструкций
38. highway and aerodrome construction	38. строительство автодорог и аэродромов

39. Certificate of engineer	39. диплом инженера
40. to offer a broad range of subjects	40. предложить широкое разнообразие предметов
41. strength of materials	41. сопротивление материалов
42. theoretical mechanics	42. теоретическая механика
43. surveying technology	43. геодезия
44. geology	44. геология
45. computing	45. вычислительная техника
46. drawing	46. черчение, рисунок
47. descriptive geometry	47. начертательная геометрия
48. basics of architectural design	48. основы архитектурного проектирования
49. painting	49. живопись
50. sculpture	50. скульптура
51. to create image, colour and pattern	51. создавать образ, цвет и форму
52. record-test	52. зачет
53. record-book	53. зачетная книжка
54. to take an examination (a record test)	54. сдавать экзамен (зачет)
55. to pass an examination (a record test)	55. сдать экзамен (зачет)
56. to fail in an examination (a record test)	56. провалить экзамен
57. final assessment of a student's	57. окончательная оценка

performance	работы студента
58. diploma certificate	58. диплом
59. defence of the diploma design (work)	59. защита дипломного проекта (работы).

1. Read and translate the text.

Text

Kazan State University of Architecture and Building Construction registers more than 7000 students including full-time students, extra mural (correspondence-course) students, over 100 post-graduates and some foreign students. Today's students of our higher school are the future specialists of the most peaceful and authoritative profession on earth.

Our University contains the Institute of Architecture and Design, which includes the department of general architecture art training, the department of architecture and the department of design; the Institute of Transport Structures which includes the department of general engineering training, the department of road safety organization; the department of highway construction; and the correspondence department of highway construction; the Institute of Economics and Business Management in Construction which includes the department of economics and business management in construction and the department uniting correspondence, Sunday, distance and the second higher education.

There are also such departments at our University as the oldest department of building construction, the department of building materials and structures production technology, the department of engineering systems and ecology and the correspondence engineering department.

There is also the innovating degree course training Bachelors and Masters of Sciences, the center of humanitarian education and the children's school of architecture.

The students acquire knowledge in the following main specialties: architecture, civil and industrial construction, highway and aerodrome construction, bridge and tunnel construction, environment conservation, process of building materials and structures production, economics and business management in construction, housing and communal services, municipal economy, examination and valuation of real estate.

The levels of professional qualifications are Bachelor of Sciences (4 years), Certificate of engineer (5 years), Master of Sciences (6 years), post-graduate courses (3 years).

Our University offers a broad range of subjects: higher mathematics, physics, chemistry, building materials, strength of materials, theoretical mechanics, surveying technology, computing, a foreign language, drawing, descriptive geometry, history, philosophy taken in common by all the students. The students of the department of architecture are also taught the basics of architectural design, painting and sculpture.

The academic process includes lectures, tutorials, seminars, laboratory work and practical training for students.

Examinations and records tests are taken by students twice a year at the end of each term. Final assessment of a student's performance is based upon the diploma work. Diploma certificate is awarded upon completion of the training course and defense of the diploma design. The University trains highly qualified specialists: architects, economists and civil engineers.

Our graduates have an excellent chance to get a Diploma Certificate of additional profession as translators in professional communication.

2. Answer the following questions.

1. How many Institutes does our University consist of?
2. How many departments are there at our University?
3. What department do you study at?

4. What subjects are the most difficult for you?
5. How often do students take record tests and exams?
6. What levels of professional qualification does our University award to its graduates?
7. What are you going to obtain?

Part III
Aims. Teaching methods. Entry requirements.

Vocabulary

- | | |
|--|---|
| 1. broadly based education | 1. образование широкого профиля |
| 2. to reason logically | 2. рассуждать логически |
| 3. to undertake research | 3. проводить научное исследование, заниматься научным исследованием |
| 4. to communicate to | 4. сообщать, передавать |
| 5. to equip the graduate | 5. дать выпускнику необходимое знание |
| 6. to undertake planning work | 6. заниматься планировочной работой |
| 7. to be creatively responsive | 7. творчески реагировать |
| 8. job and wealth creation | 8. создание рабочих мест и благосостояния |
| 9. to maintain a healthy interest | 9. поддерживать здоровый интерес |
| 10. current design trends and developments | 10. современные тенденции и разработки проектировании |
| 11. commitment | 11. стремление |
| 12. to tend | 12. стремиться
справляться с |
| 13. to cope with the changing and | 13. изменяющимися и |

	возникающими условиями
emerging conditions	
14. modern approach to construction	14. современный подход к строительству
15. in compliance with the requirements	15. согласно требованиям
16. syllabus	16. учебная программа
17. construction management	17. управление строительством
18. market research	18. изучение рынка
19. contract administration	19. договорное управление
20. financial management	20. управление финансами
21. communication skills	21. искусство общения
22. course is designed	22. курс запланирован
23. to train highly qualified specialists	23. готовить высококвалифицированных специалистов
24. liberal education	24. широкое общее образование, гуманитарное образование
25. teaching staff	25. преподавательский штат (состав)
26. the need is established	26. создается потребность
27. general certificate of secondary education	27. аттестат среднего образования
28. to take competitive examinations	28. сдавать конкурсные экзамены

29. applicant	29. абитуриент
30. to call for an interview	30. вызвать на собеседование
31. selection procedure	31. процедура отбора
32. to assess the University facilities	32. оценить университет и его помещения.

1. Read and translate the text.

Text

Aims. The aims of the course are: to provide a broadly based education in planning and construction which gives students the ability to think clearly, to reason logically, to undertake systematic research and to communicate facts and ideas to other people.

To equip the graduate not only to undertake planning work but also to be creatively responsive to a rapidly changing world in which economic development and job and wealth creation are important.

Students are expected to research fully and analytically in order to develop the best possible solution of design problems: Students are expected to maintain a healthy interest in current design trends and developments through reading and study and to increase their confidence and commitment to achieve high standards of professional skill.

Teaching methods. At present it's quite evident that our University is moving away from its traditional methods. It is tending to organize more realistic courses to cope with the changing and emerging conditions in the practice of architecture and construction industry that requires graduates with a modern approach to construction. And the University tries to give its students the contemporary education in compliance with the requirements of modern market economy.

Communication skills are essential for modern managers. Students are placed in realistic situations requiring problems to be solved and

decisions to be made. Providing a liberal and practical education our teaching staff tries to develop the creative and critical potential of each student.

Entry requirements. Before entering university applicants think a lot, attend Welcome Day which is generally held in winter and spring, surf the Internet and then make their decision.

For entry any higher school you should have General Certificate of secondary Education and Unified State Certificate. USE is taken by all the pupils in Russia. There are two compulsory exams (Mathematics, Russian Language and Literature) and any number of optional exams.

For entry our University the applicants should have Certificate of Secondary Education and USE Certificate (Mathematics, Physics, Russian Language and Literature).

On Welcome day applicants are given the opportunity to visit the relevant Department and to assess the University and its facilities.

2. Answer the following questions.

1. What are the main aims of the courses?
2. What do you know about teaching methods on our University?
3. What education should you have to enter our University?
4. Is it prestigious to study at our University?
5. How did the entry requirements change?

The United Kingdom of Great Britain and Northern Ireland.

Part I

Great Britain

Vocabulary

1. an island ['aɪlənd]	1. остров
2. to wash	2. омывать
3. English Chanel	3. Ла-Манш (Английский канал)
4. the Strait of Dover ['streɪtəv'dəʊvə]	4. Дуврский пролив (Па-де-Кале)
5. the Gulf Stream ['gʌlf,stri:m]	5. Гольфстрим
6. the North Channel	6. Северный пролив
7. Ireland ['aɪələnd]	7. Ирландия
8. mountainous ['maʊntɪnəs]	8. гористый
9. lowland ['ləʊlənd]	9. низкая местность, низина, долина
10. moderate ['mɒd(ə)rət]	10. умеренный
11. insular ['ɪnsjələ]	11. островной
12. humid ['hju:mɪd]	12. сырой, влажный
13. mild [maɪld]	13. умеренный, мягкий
14. discrepancy [dɪs'krep(ə)n(t)sɪ]	14. несоответствие, расхождение
15. Scotland ['skɒtlənd]	15. Шотландия
16. Wales [weɪlz]	16. Уэльс
17. county ['kaʊntɪ]	17. графство
18. peninsula [pə'nɪn(t)sjələ]	18. полуостров
19. Londonderry ['lɒndənderɪ]	19. Лондондерри (город и графство)
20. the Welsh [welʃ]	20. жители Уэльса
21. parliamentary (constitutional) monarchy	21. конституционная монархия
22. the queen (king)	22. королева (король)
23. absolute [æbs(ə)'l(j)u:t]	23. неограниченный, полный, абсолютный
24. to act on the advice of	24. поступать по совету

25. legislation [ˌledʒɪˈsleɪʃ(ə)n]	25. законодательство
26. Magna Charta [ˌmægnə kɑːtə]	26. Великая хартия вольностей
27. Habeas Corpus Act [ˌheɪbiəsˈkɔːpəs]	27. основной английский закон
28. Bill of Rights	28. билль о правах
29. Judicature Act [ˈdʒuːdɪkətʃə ækt]	29. Закон о судопроизводстве
30. the House of Lords	30. палата лордов
31. the House of Commons [ˈkɒmənz]	31. палата общин
32. peer [piə]	32. пэр, лорд
33. Tory	33. партия Тори

1. Read and translate the text.

Great Britain

Great Britain (the official name – the United Kingdom of Great Britain and Northern Ireland) is situated on two islands, the larger of which is Great Britain, the smaller is Ireland. In addition to these two islands Great Britain includes over five hundred small islands. The total area of Great Britain is 244,000 sq. kms, its population is about 60 mln people. In the north-west and west the country is washed by the Atlantic Ocean and the Irish Sea, in the east – by the Irish Sea. The island of Great Britain is separated from France by the English Channel. Northern Ireland, which is a part of Great Britain and which is situated on the island of Ireland, is separated from Great Britain by the North Channel.

The island of Great Britain is divided into two parts: mountainous (in the north and west of the island) and lowland (in the south and east). There are no very long rivers in Great Britain. The most important rivers are the Thames (the deepest) and the Severn (the longest). The rivers seldom freeze in winter. Due to the moderating influence of the sea Great Britain has an insular climate, rather humid and mild, without striking discrepancy between seasons.

Great Britain consists of four main parts: England, Scotland, Wales

and Northern Ireland. Administratively Great Britain is divided into 55 counties. The biggest cities of Great Britain are London, Birmingham, Glasgow, Liverpool, Manchester, Edinburgh and Cardiff.

England is the largest part of Great Britain (it occupies over 50% of the territory and its population amounts to 83% of the total population of Great Britain). Wales is a peninsula in the south-west of the island of Great Britain. It occupies about 9% of its territory with the population of 4,8% of the total population. Scotland is the most northern part of Great Britain with a territory of 32% of the total territory and with a population of 9% of the total population of Great Britain. Northern Ireland occupies the north-east part of the island of Ireland. Its territory amounts to 5,2% of the total territory of Great Britain. The main cities of Northern Ireland are Belfast and Londonderry.

The Welsh have their own language. However, many Welsh people do not know Welsh, and English is spoken by everyone in Wales. Scotland and Ireland also have their own languages, but these are rarely spoken and English is known by everyone there.

Great Britain is a parliamentary monarchy. Officially the head of the state is the Queen (or the King). However, the power of the Queen in Great Britain is not absolute. She acts only on the advice of ministers and the Parliament. There is no written constitution in Great Britain. The main principles of British legislation are expressed in other documents, like “Magna Charta”, “Habeas Corpus Act”, “Bill of Rights”, the Parliamentary Act which decided the position of the House of Lords, and the Judicature Act. British legislation does not provide written guarantees of individual political rights.

The Parliament in Great Britain has existed since 1265 and is the eldest Parliament in the world. It consists of two Houses – the House of Lords and the House of Commons. The House of Lords consists of 1000 peers who are not elected by the people. The House of Commons is a nation-wide representative body which is elected by the people at a general election, within 5 years of the last election. After the general

election the Queen appoints the head of the government – the Prime Minister. As a rule the Prime Minister is the leader of the party that has won the election. The Prime Minister appoints ministers to make up the government.

There are two main political parties in Great Britain: the Conservative party and the Labour party. The Conservative party came into being in the 19th century as a result of the evolution of the Tory party. The Labour party was founded in 1900. Since 1906 it has borne the name of the Labour party. The Labour party won the election for the first time in 1945.

Great Britain is a highly-developed industrial country. The main fields of British industry are machine-building, ship-building, metallurgy and electronics.

2. Answer the following questions.

1. What is the official name of Great Britain?
2. What is the total area of Great Britain?
3. What is its population?
4. What are the most important rivers in Great Britain?
5. What are the main parts of Great Britain?
6. What is Great Britain from the political point of view?
7. Who is the official head of the state?
8. What does the Parliament consist of?
9. Who appoints the Prime minister?
10. Who appoints ministers to form a government?
11. What are the main political parties in Great Britain?

Part II

London

Vocabulary

- | | |
|---|--|
| 1. fortification [fɔ:tɪfɪ'keɪʃ(ə)n] | 1. укрепленный пункт, |
| 2. to spread [spred] | 2. распространять |
| 3. outwards ['aʊtwədz] | 3. наружу, за пределы |
| 4. as a matter of fact | 4. а) фактически, на самом деле; б) в сущности |
| 5. distinct [dɪ'stɪŋkt] | 5. отчетливый |
| 6. entertainment [ɛntə'teɪnmənt] | 6. развлечение |
| 7. trade | 7. торговля, ремесло, профессия |
| 8. stock exchange [ɪks'tʃeɪndʒ], [eks-] | 8. фондовая биржа |
| 9. shares [ʃeə] | 9. акции |
| 10. insurance [ɪn'ʃʊə(ə)n(t)s] | 10. страхование |
| 11. Lloyd's [lɔɪdz] | 11. Ллойд (рынок страхования) |
| 12. Central Criminal Court [kɔ:t] | 12. Центральный уголовный суд |
| 13. the Old Bailey ['beɪlɪ] | 13. Олд Бейли |
| 14. Fleet Street [fli:t stri:t] | 14. Флит Стрит |
| 15. wharf [(h)wɔ:f] | 15. верфь |
| 16. warehouse ['weəhaus] | 16. склад |
| 17. Petticoat ['petɪkəʊt] Lane market | 17. рынок на улице Петтикоут Лейн |
| 18. sight | 18. достопримечательность, точка зрения |
| 19. Trafalgar Square [trə'fælgə] | 19. Трафальгарская площадь |
| 20. Regent Street ['ri:dʒ(ə)nt] | 20. Риджент стрит |
| 21. Soho [səʊhəʊ] | 21. Сохо |
| 22. Piccadilly Circus ['sɜ:kəs] | 22. площадь Пикадилли |
| 23. Leicester Square ['lestə] | 23. площадь Лестер сквер |
| 24. Shaftesbury Avenue ['ævən(j)u:] | 24. Шафтсбери авеню |
| 25. glamour ['glæmə] | 25. чары, волшебство, обаяние, очарование |

26. to commemorate [kə'meməreɪt]	26. праздновать (годовщину), отмечать (событие), чтить память, служить напоминанием
27. whodunits [,hu:'dʌnɪt]	27. детективные пьесы
28. UK - United Kingdom (of Great Britain and Northern Ireland)	28. Соединенное Королевство (Великобритании и Северной Ирландии)
29. BBC radio news - British Broadcasting Corporation ['brɔ:dkɑ:stɪŋ]	29. Британская вещательная корпорация «Би-Би-Си» - радионовости ВВС
30. chime [tʃaɪm]	30. куранты, перезвон, выбивание
31. Westminster [,wes(t)'mɪn(t)stə] Abbey ['æbɪ]	31. Вестминстерское аббатство
32. royalty['rɔɪəltɪ]	32. королевская власть, королевское достоинство, величие, царственность
33. monarch ['mɒnək]	33. монарх
34. to bury ['berɪ]	34. похоронить, погребать

1. Read and translate the text.

London

London is the capital of Great Britain and is a very big city. It began life two thousand years ago as a Roman fortification. Around the town the Romans built a wall for defence.

Today not many people live in the city centre but London has spread further outwards into the country including surrounding villages.

Greater London now covers about 1600 square kilometers. The population of London is about 12 million.

It is difficult to speak about the centre of London as of one definite place. As a matter of fact it has a number of centres each with a distinct character: the financial and business centre is called the City, the shopping and entertainment centre is the West End, the government

centre is Westminster, and the industrial part is the East End.

The City of London is the oldest part of the capital, it is just a small area, but it is the centre of trade and commerce. It is one of the biggest banking centres of the world. Here you will find the Bank of England and the banks of many nations. Nearby is the Stock Exchange, which is like a busy market where shares in commercial companies are bought and sold. A little further is Lloyds, the most famous insurance company in the world.

The Central Criminal Court of the country is also to be found in the City. It is called the Old Bailey after the street in which it is situated.

Fleet Street is famous as the home of the nation's newspapers but, in fact, only two of them -The Daily Express and the Daily Telegraph- are still in Fleet Street. However, people still say Fleet Street when they mean the press.

The East End is the industrial part of London. It grew with the spread of industry to the east of the City and the growth of the port of London. It covers a wide area, and there are many wharves and warehouses along the river banks. The East End markets are famous throughout the world. Petticoat Lane market takes place every Sunday morning and has become one of the sights of London.

The West End is the name given to the area of central London. It includes Trafalgar Square, the main shopping area of Oxford Street, Regent Street, Bond Street and the entertainment centres of Soho, Piccadilly Circus, Leicester Square and Shaftsbury Avenue. The name West End is associated with glamour and bright lights. Most of London's big department stores are situated in Oxford Street and Regent Street.

Trafalgar Square was built at the beginning of the 19th century to commemorate the Battle of Trafalgar. Admiral Lord Nelson's statue stands on top of a column in the middle of Trafalgar Square. The large square is a traditional place for people to meet: all sorts of protest meetings are held in Trafalgar Square. Piccadilly Circus is the centre of night life in the West End. To the north of Piccadilly Circus is Soho,

which has been the foreign quarter of London since the 17th century.

London is famous for its theatres. In the West End there are over thirty theatres. They offer a great variety of shows to choose from: opera, musicals, drama, comedies, whodunnits, and so on.

Westminster. Every day, when people in the UK and overseas switch on their radio to listen to BBC radio news, they can hear one of the most famous sounds in London: the chimes of Big Ben on the Elizabeth Tower.

The Houses of Parliament occupy a magnificent building on the left bank of the Thames in a part of London called Westminster that has long been connected with royalty and government.

Westminster Abbey. Opposite the Houses of Parliament stands Westminster Abbey. A church has stood here since Saxon times. Since William the Conqueror's times British monarchs have been crowned there, and since the 13th century they have been buried there.

Many other famous people are also buried in Westminster Abbey.

The street called Whitehall stretches from Parliament Square to Trafalgar Square. Whitehall is often associated with the government of Britain.

Downing Street, which is a small side street of Whitehall, is the home of the Prime Minister who lives at number ten.

2. Answer the following questions.

1. When was the city of London founded? Why did the Romans build a wall around the city?
2. How large is the territory of Greater London now?
3. Why is it difficult to speak about the centre of London as of one definite place?
4. What is the Old Bailey?
5. What is the Fleet Street famous for?
6. Where are the most of London's big department stores situated?
7. What does Trafalgar Square commemorate?

8. What monument stands in the centre of Trafalgar Square?
9. In what part of London is the building of the Houses of Parliament situated?
10. What is Big Ben?
11. What is Westminster Abbey famous for?
12. Who lives in Downing Street number 10?

Architecture

Vocabulary

1. arch [ɑ:tʃ]	1. арка, свод
2. capital	2. капитель (колонны)
3. column ['kɒləm]	3. колонна, столб
4. cornice ['kɔ:nɪs]	4. карниз
5. dressed stone	5. отделанный камень, тёсанный камень
6. funerary ['fju:n(ə)rəri]	6. погребальный, траурный
7. incised relief [ɪn'saɪzd rɪ'li:f]	7. врезанный или резной рельефный орнамент
8. permanence ['pɜ:m(ə)nənt(s)]	8. стойкость, устойчивость, прочность
9. post-and-lintel [pəʊst 'ɪnt(ə)l]	9. стоечно-балочная (система строительства)
10. steeply battered pylon ['paɪlɒn]	10. сильно (круто) суженный кверху пилон
11. temple	11. храм, святилище
12. vault [vɔ:lt]	12. свод
13. corbel vaulting ['kɔ:b(ə)l 'vɔ:ltɪŋ]	13. ложный свод (конструкция из кирпича и камня внапуск)
14. acropolis [ə'krɒpəlɪs]	14. акрополь
15. agora ['ægərə], [,ægə'ra:]	15. агора (рыночная площадь и место народных собраний)
16. bath [bɑ:θ]	16. баня, купальня
17. devise [dɪ'vaɪz]	17. разрабатывать, изобретать
18. divinity [dɪ'vɪnəti]	18. божественность, святость
19. enclose [ɪn'kləʊz], [en-]	19. огораживать, закрывать
20. eternally [ɪ'tɜ:n(ə)li]	20. вечно, постоянно
21. precinct	21. двор (закрытое от улицы, замкнутое)

	['pri:sɪŋkt]		пространство двора), закрытый двор
22.	suit [s(j)u:t]	22.	удовлетворять требованиям, подходить, устраивать
23.	trabeated ['treɪbiətɪd]	23.	(построенный) с балочным перекрытием; относящийся к стоечно-балочной системе
24.	valid ['væɪlɪd]	24.	действующий, признаваемый
25.	work of art	25.	произведение искусства
26.	accept [æk'sept]	26.	принимать, допускать, признавать
27.	accomplishment	27.	выполнение (работ), реализация (плана); совершенство
28.	architrave ['ɑ:kɪtreɪv]	28.	архитрав, архитравная балка
29.	base	29.	основание колонны
30.	beam	30.	балка
31.	bell-shaped	31.	колоколообразный
32.	elaborate [ɪ'læb(ə)rɪt]	32.	тщательно разработанный
33.	entablature [en'tæblətʃə], [ɪn-]	33.	антаблемент, архитрав
34.	entasis ['entəsis]	34.	выпуклость колонны, энтазис
35.	fillet ['fɪlɪt]	35.	поясок, углубление, полоска
36.	fluted ['flu:tɪd]	36.	рифлёный
37.	frieze [fri:z]	37.	фриз, бордюр
38.	metope ['metəʊp]	38.	метопа (небольшая плита, обычно квадратная, расположенная между двумя триглифами дорического фриза)
39.	mould [məʊld]	39.	облом, профиль, форма; опалубка для кладки бетона
40.	mutule ['mjʊ:tju:l]	40.	мутула
41.	ornate [ɔ:'neɪt]	41.	богато или нарядно украшенный
42.	pediment ['pedɪmənt]	42.	фронтон, сандрик, основание

43.	pillar ['pɪlə]	43.	столб, колонна, опора
44.	scroll	44.	завиток, волюта, спираль, свиток
45.	shaft	45.	ствол, стержень (колонны), фуст
46.	slender	46.	тонкий, стройный, небольшой
47.	spreading	47.	простирающийся, распространяющийся
48.	swelling	48.	припухлость, выпуклость
49.	triglyph ['trɪɡlɪf]	49.	триглиф (элемент фриза дорического ордера в виде прямоугольной плиты с вертикальными бороздками)
50.	volute [və'lu:t]	50.	волюта, спираль, завиток
51.	atrium ['eɪtriəm]	51.	атриум, крытый портик
52.	axial [æksɪəl]	52.	осевой, по направлению оси
53.	concrete ['kɒŋkri:t]	53.	бетон
54.	degrade [dɪ'ɡreɪd]	54.	ухудшать, приходить в упадок, снижать
55.	dome [dəʊm]	55.	купол, свод
56.	enliven [ɪn'laɪv(ə)n], [en-]	56.	оживлять
57.	inward-looking	57.	обращенный во двор
58.	peristyle ['perɪstaɪl]	58.	перистиль
59.	portico ['pɔ:tɪkəʊ]	59.	портик, крытая галерея
60.	spatial ['speɪʃ(ə)l]	60.	пространственный
61.	straggling ['stræɡlɪŋ]	61.	разбросанный, беспорядочный
62.	suburban [sə'bʌ:b(ə)n]	62.	пригородный, загородный
63.	tenement ['tenəmənt]	63.	помещение, сдаваемое в аренду
64.	elaborate [ɪ'læb(ə)rɪt]	64.	отделанный, тщательно разработанный
65.	Greek cross	65.	равноконечный крест

66.	incise [ɪn'saɪz]	66.	вырезать, насекать, гравировать
67.	Latin cross ['lætɪn]	67.	крест с тремя примерно равными крыльями и одним длиннее остальных
68.	marble ['mɑ:bl]	68.	мрамор
69.	pendentives [pɛn'dɛntɪv]	69.	паруса свода или купола
70.	plaster	70.	штукатурка
71.	fenestration [,fɛnɪ 'streɪf(ə)n]	71.	стекление, размещение окон по фасаду здания
72.	flying buttress ['blaɪtrɪs]	72.	аркбутан, арочный контрфорс
73.	pointed arch	73.	стрельчатая/остроконечная арка
74.	rib	74.	ребро
75.	vault [vɔ:lt]	75.	свод
76.	entablature [en'tæblətʃə], [ɪn-]	76.	антаблемент
77.	evolve [ɪ'vɔlv]	77.	развиваться, эволюционировать, превращаться
78.	pilaster [pɪ'læstə]	78.	пилястра
79.	ribbed [rɪbd]	79.	рифлёный, ребристый
80.	broken pediments ['pedɪmənt]	80.	разорванные фронтоны
81.	carving ['kɑ:vɪŋ]	81.	резной, орнамент
82.	conspicuous [kən'spɪkjʊəs]	82.	видимый, заметный, выдающийся, экстравагантный
83.	curved ['kɜ:vɪd]	83.	изогнутый
84.	exuberant [ɪg'z(j)u:b(ə)r(ə) nt]	84.	роскошный, пышный
85.	foliation [fəʊlɪ'eɪf(ə)n]	85.	растительный орнамент, листообразность
86.	intermingling	86.	переплетение

	[,ɪntə'mɪŋɡl]		
87.	interpenetration	87.	взаимопроникновение
88.	pearl [pɜ:l]	88.	жемчуг
89.	profusion [prə'fju:z(ə)n]	89.	изобилие, богатство
90.	seaweed ['si:wi:d]	90.	морские водоросли
91.	wreath [ri:θ]	91.	веночек
92.	bow [bau]	92.	арка
93.	bracket ['brækɪt]	93.	кронштейн, консоль
94.	cabochon ['kabəʃɒn]	94.	кабошон (неогранённый драгоценный камень, либо драг. камень с особой формой шлифовки)
95.	faience [faɪ'ɑ:n(t)s]	95.	фаянс
96.	floral ['flɔ:r(ə)l]	96.	цветочный (орнамент)
97.	grille [grɪl]	97.	решетка
98.	mould [məʊld]	98.	форма, опалубка
99.	pilotis [pɪləti]	99.	столбы-ходули, поднимающие здание над землей
100	slab	100	плита
.	.	.	.
101	split-level dwelling unit	101	жилая единица в разных уровнях
.	.	.	.
102	stained glass	102	витражное стекло, витраж
.	.	.	.
103	steel	103	сталь
.	.	.	.
104	stoneware	104	керамика, керамические изделия, гончарные изделия
.	.	.	.
105	sunbreaker	105	солнцезащитное устройство
.	.	.	.
106	tapered ['teɪpəd]	106	конический, конусный
.	.	.	.
107	veneer [və'niə]	107	фанерная обшивка, шпон
.	.	.	.

108 wrought-iron
[rɔ:t 'aɪən]

108 кованое железо, ковкий чугун

1. Read and translate the texts.

Egyptian Architecture

The architecture of Egypt developed from the 3rd millennium B.C. to the Roman period. Its most outstanding achievements are its massive funerary monuments and temples built of stone for permanence, featuring only post-and-lintel construction, corbel vaults without arches or vaulting, and pyramids. This architecture gave the world the earliest buildings in dressed stone, invented the column, capital and cornice. Features peculiar to the ancient Egyptian architecture also include the obelisk, the steeply battered pylon, the symbolical lotus column, and incised relief decoration without any structural relevance.

Examples of Egyptian architecture: The pyramids of the Old Kingdom, 2700-2300 B.C., majestically planted on the desert edge, are the most spectacular of all funerary works. They were built to contain the burial chamber and the mummy of the pharaoh. In the Middle Kingdom, 2134-1650 B.C., it is the pyramid of Sesostris I at Lisht. In the New Kingdom, c. 1570-1085 B.C., it is the mortuary temple of Queen Hatshepsut (the only woman-pharaoh); the magnificent Great Temple at Karnak; the Great Sphinx.

Ancient Greek Architecture and Town Planning

The ambition of the ancient Greek architects was to discover eternally valid rules of form and proportion. They erected buildings human in scale. Their structures were suited to the divinity of their gods. They wanted to create a classically ideal architecture. *The Parthenon* remains the nearly perfect building ever erected.

Greek cities. The basic elements of the typical Greek city plan comprise the acropolis, the enclosing city wall, the agora or market-place, residential districts, one or more leisure and cultural areas, a

religious precinct, the harbour and port, and possibly an industrial district. Hellenistic (after 323 B.C.) cities contained public fountains and theatres; specially devised council chambers; gymnasia, schools and libraries; even public baths and lavatories.

The main great achievements of Greek architecture are its perfectly designed and ornamented trabeated temples and its conception of the city itself as a work of art. Another example of ancient Greek architecture is an Ionic temple of Athena, *the Erechtheum*, built by an anonymous architect in 421-06 B.C.

Orders of Architecture

The orders are the highest accomplishment of the pillar and beam construction. In classical architecture, the order is a column with base (usually), shaft, and capital, and entablature, decorated and proportioned according to one of the accepted modes. The Greeks developed the Doric, Ionic, and Corinthian orders. The Romans added the Tuscan and Composite.

The entablature is the upper part of a classical order, between columns and pediment, consisting of architrave (the lowermost part), frieze (in the middle), and cornice (the uppermost part).

The columns have entasis or the slight swelling towards their centres. Its object is to correct the optical illusion that the column is thinner in the middle if its sides were straight or parallel.

The Doric is the oldest order subdivided into Greek Doric and Roman Doric. Greek Doric is the simplest and the most massive, it has no base, as on the Parthenon. Roman Doric had a base and was less massive. The parts of Greek Doric: the simple, baseless columns, the spreading capitals, and triglyph-metope frieze above the columns.

The Ionic order originated in Asia Minor in the mid 6th century B.C. It is characterized by a moulded base; tall, slim column shafts. Its capitals have large volutes, or spiral scrolls. It was less heavy than the Doric and less elaborate than the Corinthian.

The Corinthian order was the Athenian invention of the 5th century B.C. It is the slenderest and most ornate of the three Greek orders. In its general proportions it is very like Ionic. It is characterized by high base, sometimes a pedestal; slim, fluted column shaft with fillets; bell-shaped capital with 8 volutes and two rows of acanthus leaves.

The Tuscan order is a simplified version of the Roman Doric, having a plain frieze and no mutules in the cornice. The columns are unfluted. The mouldings are fewer and bolder.

The Composite order is a late Roman combination of elements from the Ionic and Corinthian orders. This order is really a variety of the Corinthian.

Roman Architecture

Whereas Greek architecture is tectonic, built up from logical series of horizontals and verticals, Roman architecture is plastic with much use of rounded forms (arch, vault, and dome). In Greek and Hellenistic architecture the column was the most important member; in Rome the column was often degraded to merely decorative uses, while the wall became the essential element.

The true greatness of the Romans lay in the creation of interior space. In domestic architecture three types were developed: the domus or town-house; the insula or multi-storey apartment house or tenement block, and the villa or suburban or country house.

The domus derived from the Greek and Hellenistic house and was usually one storey only and inward-looking (обращенный во двор), the rooms being grouped axially (по направлению оси) and symmetrically around the atrium and one or more peristyle courts.

The insula had several identical but separate floors and was often vaulted throughout with concrete construction.

The villa was derived from the traditional farm-house and was more casual and straggling (разбросанный, беспорядочный) in plan than the domus. The exteriors were enlivened (оживлять) with porticos

and colonnades, rooms were designed to catch the view, or the sun in winter or the shade in summer.

Roman architecture reached its apogee in the Pantheon, Rome (c. AD 100-25, with a dome 141 feet in diameter). Other typically Roman buildings are: *thermae*, with their rich decoration and complicated spatial play; amphitheatres, of which the Colosseum, Rome (AD 69-79) is the largest; triumphal arches, a purely decorative type of building, always of the Corinthian or Composite order.

Byzantine Art of Building

The architecture of Byzantium, or Eastern Roman Empire, was the culmination of Early Christian Architecture. This style developed after 330 BC, spread widely, and lasted throughout the Middle Ages until the fall of Constantinople to the Turks in 1453. Byzantine architecture is characterized by large pendentive-supported domes, round arches and elaborate columns, richness in decorative elements, and colour.

The Byzantine style reached its climax in the reign of the Emperor Justinian (527-65). He built and rebuilt 26 churches, many hospitals, bridges, aqueducts, and fortresses.

Brick was the main material used for construction of Byzantine churches. It was covered externally with plaster and internally with thin marble plates and mosaics above. Byzantine decoration was flat and incised. Byzantine churches followed the plan of a Greek cross, that is a central domed space with four short square arms (evolved c. 7th century).

Examples are to be seen in the small Metropolitan Cathedral in Athens, at Church of Hagia or Saint Sophia in Constantinople (now Istanbul), in Cathedral of St. Sophia in Kiev. In Moscow the Cathedral of St. Basil the Blessed, in Red Square, represents the culmination of the Russian Byzantine style.

The Gothic Style

The Gothic style represented the High Middle Ages in Western Europe. It emerged from Romanesque and Byzantine forms in France

during the later 12th century. Its great works are cathedrals, characterized by the pointed arch, the rib vault, the development of the exterior flying buttress, and the gradual reduction of the walls to a system of richly decorated fenestration, and vertical emphasis in structure. Gothic architecture lasted until the 16th century, when it was succeeded by the classical forms of the Renaissance. In France and Germany we can speak of the Early, High and Late Gothic. Gothic architecture flourished in France, England, Germany, Italy, Netherlands, as well as in Spain, Sweden, Czechia, Poland, Estonia, Latvia and Lithuania.

Some examples of the gothic style: Westminster Abbey in London, Salisbury Cathedral in UK, the abbey of Saint-Denis in Paris.

The Renaissance

This architectural style developed in early 15th century Italy during the rebirth of classical art and learning. It succeeded the Gothic as the style dominant in all of Europe after the mid 16th century, and evolved through the Mannerist phase into Baroque and in the early 17th century into classicism. It is characterized by the use of the classical orders, round arches, and symmetrical composition.

Filippo Brunelleschi (1377-1446) is said to have created the Renaissance and he was the first to work out and demonstrate the Renaissance system of perspective. The Renaissance style has fluted pilasters carrying entablatures, columns supporting arches, unribbed vaults. The Renaissance style of other European countries has little in common with the qualities of the Italian Renaissance.

Examples: St. Peter's cathedral in Rome, the Cathedral of the Assumption (1475) on Kremlin Hill (Russia), Cathedral of the Archangel Michael (1505) in Moscow.

Baroque and Rococo

The Baroque is a European style of architecture and decoration. The word "Baroque" means irregular or imperfect, especially with

reference to pearls. The Baroque developed in the 17th century in Italy from late Renaissance and Mannerist forms. The Baroque style is characterized by spatially complex compositions, interpenetration of oval spaces, curved surfaces, and conspicuous use of decoration (broken pediments, paired or coupled columns or pilasters), sculpture and colour. There was an exuberant profusion of motifs – festoons of flowers and fruits, masks, scrolls, wreaths, and trophies of weapons.

The Rococo is assumed to have been the late phase of the Baroque, primarily French in origin. The Rococo is represented by profuse, asymmetrical, often semi-abstract ornamentation and lightness of colour and weight, as opposed to Baroque grandeur. One can find an exuberant intermingling of shells, C- and S-scrolls, rocks, seaweed, ribbons, and carving, and irregular acanthus foliation.

In Russia the Rococo was brilliantly developed by Bartolomeo Rastrelli. His masterpieces are the Great Palace, Tsarskoye Selo (1749-1756), and the Winter Palace, St. Petersburg (1754-1762).

The Architecture of the 19th and 20th centuries

Art Nouveau is characterized by organic and dynamic forms, and curving design. The curved line may be floral (Belgium, France) or geometric (Scotland, Austria). This florid type of architecture exploits craft skills, using coloured materials (faience cabochons, stoneware, terracotta panels, stained glass, exotic veneers, moulded stonework), grilles, balconies, and tapered brackets in wrought-iron. Asymmetrical door- and window-frames, bow and horseshoe windows were also favoured. The most important representatives of Art Nouveau are: in Spain Antoni Gaudi (1852-1926), in Russia Fyodor Shekhtel (1859-1926), in Germany Herman Obrist (1863-1927).

The classicism that flourished in the period of 1750-1830 is often known as **Neoclassicism**, in order to distinguish it from the classical architecture of ancient Rome or of the Renaissance. The centre of international Neoclassicism was Rome, but the leading actors in the

Neoclassicism drama were French, German, or English; very little was contributed by Italians to this new movement. The centre of activity was the French Academy. Characteristics: strict geometric organization, simplicity of geometric forms, dramatic use of columns, preference for blank walls and the contrast of formal volumes and textures.

Modern Architecture developed in a number of countries after the First World War as the International Style, or **Functionalism**. It has culminated in the current design of glass, concrete and steel. Exploitation of new materials led to the changed appearance of buildings; simple rectangular outlines; avoidance of symmetry; absence of applied ornament; flat roofs and white walls (from reinforced concrete); large windows.

Constructivism is a movement originated in Moscow after 1917, primarily in sculpture, but with broad application to architecture. In architecture it can be regarded as part of the Functionalism. The expression of construction was to be the basis for all building design, with emphasis on functional machine parts. The most famous example is Vladimir Tatlin's project of a monument to the Third International in Moscow (1920).

Organic architecture is a philosophy of architectural design, emerging in the early 20th century, asserting that in structure and appearance a building should be based on organic forms and should harmonize with its natural environment.

Art Deco was a decorative style stimulated by the Paris Exposition International des Arts Decoratifs et Industrielles Modernes of 1925, widely used in the architecture of the 1930s, including skyscraper designs such as the Chrysler Building in New York; characterized by sharp angular or zigzag surface forms and ornaments. Also referred to as Stile Moderne.

Brutalism, or New Brutalism, is a movement in modern architecture, developed after the Second World War, emphasizing stark forms and raw surfaces, particularly of concrete.

Post-Modernism originated in the 1970s. Aware of the public dissatisfaction with the coldness of modernism the post-modernists developed “fun” architecture that encouraged using traditional materials and copying idioms from the past, regardless of suitability, thus becoming a kind of Re-Revival.

Le Corbusier, Charles-Edouard (Jeanneret) (1887-1966) was the most influential and the most brilliant of the 20th century architects. He published and publicized a number of total plans for cities with a centre of identical skyscrapers, symmetrically arranged in a park setting, with lower building and complex traffic routes between. The formulas of Corbu’s architectural typology are: the slab, the split-level dwelling unit, the sunbreaker, the pilotis and the roof garden. He advanced ‘Le Modulor’, the system of proportions based upon the male figure, used to determine the proportions of building units.

2. Answer the following questions.

1. Why did you make up your mind to become an architect?
2. What famous architects do you know? Who is your favourite architect?
3. What system of construction was used in Ancient Egypt?
4. Into what periods may the ancient Egyptian architecture be classified?
5. What principal components did the typical Greek city plan consist of?
6. What were the most important achievements of Ancient Greek architecture and town planning?
7. What is the order in classical architecture?
8. Which orders were invented by the Greeks? Describe them.
9. Which orders were invented by the Romans? Speak about them.
10. What greatest temples of Roman architecture do you know?
11. What were the tree types of houses in Roman architecture?
12. What are the typical features of Byzantine architecture?
13. What are the main features of the Gothic style?
14. When, where and how did the Renaissance begin to develop?

15. What are the typical features of Baroque and Rococo?
16. How can you characterize Art Nouveau?
17. Why is Neoclassicism called so?
18. When did Functionalism evolve?
19. What are the main architectural streams of the 20th century?

English for Architects

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