Куліш І.М., Зінченко А.В.

ENGLISH FOR CHEMISTS



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ ЧЕРКАСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ІМЕНІ БОГДАНА ХМЕЛЬНИЦЬКОГО

ENGLISH FOR CHEMISTS

УДК 811. 111 (075.8) ББК 81. 2Ан – 91 К 90

Рецензенти:

- **С.Р. Бабушко**, доктор педагогічних наук, професор, завідувач кафедри іноземних мов Національного університету фізичного виховання і спорту України, м. Киів
- **І.В. Некоз** кандидат педагогічних наук, доцент кафедри іноземних мов Черкаського національного університету ім. Б. Хмельницького

English for Chemists: Навчальний посібник для студентів спеціальності «Хімія». Укладачі: Куліш І.М., Зінченко А.В. – Черкаси, 2024. – 117 с.

Навчальний посібник сформований у відповідності до програми з іноземної мови за професійним спрямуванням для студентів 1 курсу спеціальності «Хімія».

Навчальний матеріал розташовано за тематичним принципом (за розділами) та має комплексний характер. Два розділи охоплюють навчальний матеріал з іноземної мови професійного спрямування, два розділи включають теми загального спілкування та два розділи зосереджуються на схематичному повторенні граматичного матеріалу та застосування отриманих знань на практиці.

Робота за темою в межах одного розділу організовується на базі тексту професійного чи загального спрямування, лексичних вправ та завдань комунікативного характеру професійного та загального спрямування, текстів для додаткового читання, системи граматичних вправ репродуктивного та творчого характеру. Посібник вміщує завдання для самостійної роботи студентів та вправи для контролю умінь та навичок студентів.

Затверджено до друку на засіданні вченої ради Черкаського Національного університету імені Богдана Хмельницького протокол № 6 від 21.12.2023

ISBN

ЧНУ ім. Б. Хмельницького, 2024 Куліш І.М., Зінченко А.В., 2024

ПЕРЕДМОВА

Навчальний посібник призначається для студентів 1 курсу спеціальності «Хімія». Мета посібника — формувати у студентів навички читання та розуміння літератури фахової професійної тематики на основі активізації знань загальновживаної лексики та основ граматики. Поряд з цим у посібнику реалізується мета комплексного оволодіння студентами всіма видами мовленнєвої діяльності на основі комунікативного підходу до вивчення іноземної мови. Посібник базується на різноманітному автентичному матеріалі, який підібрано з урахуванням комунікативного підходу у вивченні англійської мови та спрямовано на розвиток позитивної мотивації до вивчення іноземної мови.

Навчальний матеріал професійного спрямування посібника розподілено на два тематичних розділи "Chemistry as a Science" та "Chemistry Subdisciplines", текстовий матеріал яких згруповано за такими темами професійного інтересу студентів, як вступ до хімії, матерія та її станиб фізичні та хімічні зміни, хімічні реакції, підрозділи хімії та інші. Кожний розділ, в свою чергу, вміщує декілька текстів професійного спрямування, які з різних сторін висвітлюють тему, та текстів, які несуть додаткову інформацію за певною тематикою.

Навчальний матеріал загального спрямування має на меті розвиток комунікативних навичок у щоденному спілкуванні, сприяючи розвитку навичок говоріння, аудіювання, читання та письма. Комунікативні вправи мають різноплановий вплив на навчальний процес та стимулюють пізнавальний інтерес особистості студента.

Граматичні вправи вміщують основні програмні явища англійської мови, які необхідні для розуміння даного лексичного матеріалу, тобто, основну інформацію про частини мови, їх особливості та специфіку вживання. Граматичні вправи спрямовані на засвоєння необхідного граматичного матеріалу, ефективне його повторення та практичне застосування отриманих знань.

Навчальний посібник включає граматичний довідник, призначений для самостійної роботи студентів з метою повторення раніше вивченого граматичного матеріалу.

UNIT I INTRODUCTION TO CHEMISTRY

Lesson 1 The Scope of Chemistry

(From Libre Texts. Chemistry. Retrieved from: https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM100_-
Fundamentals of Chemistry/01%3A The Chemical World)

Chemistry is the study of matter and the ways in which different forms of matter combine with each other. Chemistry forms the fundamental basis for biology and medicine from the structure of proteins and nucleic acids, to the design, synthesis and manufacture of drugs.

Chemistry is the branch of science dealing with the structure, composition, properties, and the reactive characteristics of matter. Matter is anything that has mass and occupies space. Moreover, chemistry is the study of the transformation of matter.



Chemists are the people that study the nature of matter and learn to design, predict, and control chemical transformations. There are several apparent subdivisions within the branches of chemistry. Inorganic chemistry, historically, focused on minerals and metals found in the earth, while organic chemistry dealt with carbon-containing compounds

that were first identified in living things. Biochemistry is an outgrowth of the application of organic chemistry to biology and relates to the chemical basis for living things.



1. Find the English equivalents in the text:

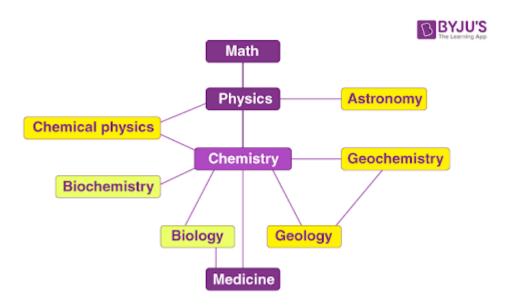
Вивчати матерію, формувати основу, білок, нуклеїнова кислота, розробка ліків, виробництво ліків, склад матерії, властивості матерії (речовини), перетворення речовини, прогнозувати хімічні перетворення, очевидні підрозділи, зосереджуватися на мінералах,

вуглецевмісні сполуки, наслідок застосування, бути пов'язаним з хімічно основою.

2. Translate the following terms and terminological expressions:

Matter, fundamental basis, protein, nucleic acid, synthesis of drugs, reactive characteristics, transformation of matter, chemist, subdivision, inorganic chemistry, organic chemistry, carbon-containing compound, biochemistry.

3. Look at the scheme and say what branches chemistry is associated with:



4. Look at the slide and answer the questions:

- 1) What does chemistry deal with?
- 2) What are the main branches of chemistry?





Chemistry is the branch of science that deals with the identification of the <u>substances of which matter is composed</u>; the investigation of their properties and <u>the ways in which they interact</u>, <u>combine</u>, <u>and change</u>; and the use of these processes <u>to form new substances</u>.

The main branches of chemistry are: organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, and biochemistry.

Glossary of terms | © www.WorksheetsPlanet.com | All rights reserved

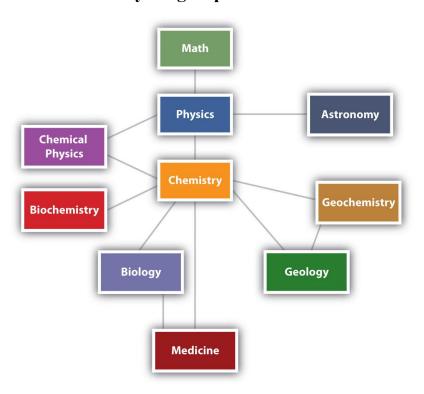


5.

5. Complete the sentences:

- 1) Chemistry is the study of _____ and the changes it undergoes.
- 2) Matter is anything that has _____ and occupies _____.
- 3) Moreover, chemistry is the study of ______.
- 4) Chemists are the people that study .
- 5) The five main disciplines of chemistry are
- 6) Inorganic chemistry focuses on _______.
- 7) Organic chemistry deals with _______.
- 8) Biochemistry relates to ______.

6. Read the text, look at the scheme, put 4 questions and discuss them with your groupmates:



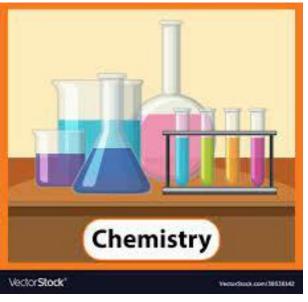
Chemistry is one branch of science. Science is the process by which we learn about the natural universe by observing, and then testing, generating models that explain our observations. Because the physical universe is so vast, there different are many branches of science (Figure 1). Thus, chemistry is the study of matter, biology is the study of living things, geology is the study of

rocks and the earth. Mathematics is the language of science, and we will use it to communicate some of the ideas of chemistry.

7. Match the notions and their definitions:

Chemistry	is concerned with the application of the concepts and
	theories of physics to the analysis of chemical systems and
	their physical behaviour
Biochemistry	the study of energy and matter in space and time and how
	they are related to each other
Geochemistry	the branch of Earth Science that applies chemical
	principles to deepen an understanding of the Earth system
	and systems of other planets
Chemical	a natural science discipline that studies living things
physics	
Physics	explores chemical processes related to living organisms
Biology	a branch of natural science that deals principally with the
	properties of substances, the changes they undergo, and the
	natural laws that describe these changes
Analytical	the science of obtaining, processing, and communicating
chemistry	information about the composition and structure of matter

8. Answer the questions for summary:



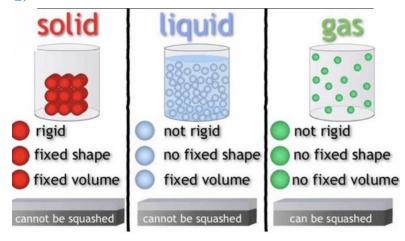
- 1) What does chemistry study?
- 2) What does chemistry form the fundamental basis for?
- 3) What does chemistry deal with?
- 4) What is matter?
- 5) What do chemists study?
- 6) What are the branches of chemistry?
- 7) What dies inorganic chemistry focus on?
- 8) What do organic chemistry deal with?
- 9) What does biochemistry relate to?
- 10) What science is analytical chemistry?

Lesson 2 Matter and its States

(From Libre Texts. Chemistry. Retrieved from:

https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM100_-

Fundamentals of Chemistry/01%3A The Chemical World/1.6%3A Solid Liquid and Ga s)



Matter typically exists in one of three states: solid, liquid, or gas. The state a given substance exhibits is also a physical property. Some substances exist as gases at room temperature (oxygen and carbon dioxide). while others. like water and mercury metal, exist as

liquids. Most metals exist as solids at room temperature. All substances can exist in any of these three states.

Technically speaking a fourth state of matter called plasma exists but it does not naturally occur on earth.

Solids are defined by the following characteristics:

- Definite shape (rigid)
- Definite volume
- Particles vibrate around fixed axes

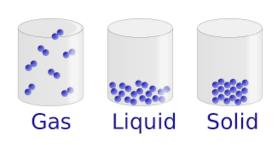
Liquids have the following characteristics:

- No definite shape (takes the shape of its container)
- Has definite volume
- Particles are free to move over each other, but are still attracted to each other

Gases have the following characteristics:

- No definite shape (takes the shape of its container)
- No definite volume
- Particles move in random motion with little or no attraction to each other
 - Highly compressible

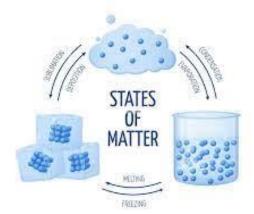
1. Find the English equivalents in the text:



Стан фізична речовини, кімнатній властивість, при температурі, зустрічатися на землі, визначатися характеристиками, певна жорстка форма, певний форма, (визначений) об'єм, притягуватися один одного, рухатися ДО

випадковому порядку, незначне притягання, високо стисливий.

2. Translate the following terms and expressions:



Matter, substance, solid, liquid, gas, physical property, at room temperature, oxygen, carbon dioxide, water, mercury, metal, shape, volume, particle, random motion.

3. Match the notions and their definitions:

Substance	
	container but retains a nearly constant volume independent of pressure
Solid	the state of matter in which the particles are far apart, fast-moving
	and not organised in any particular way
Liquid	a state of matter that retains its shape and density when not confined
Gas	a state of matter in which an ionized substance becomes highly
	electrically conductive to the point that long-range electric and
	magnetic fields dominate its behaviour
Plasma	a particular kind of matter with uniform properties
Particle	one of the very small parts of matter (as a molecule, atom, or
	electron)

4. Complete the sentences:



1) The four fu	undamental sta	ites of 1	matter
are			
2) Gases, liqu	ids, and solids	are all	made
of microscopio	c		
	substances		as
	at		room
temperature, fo	or example		
4) Other	substances	exist	as
		at	room
temperature,	for	ex	ample

- 5) Solids have the following characteristics:
- 6) Liquids have the following characteristics:
- 7) Gases have the following characteristics:
- 5. Look at the picture, put 3 questions, discuss them with your groupmates:

Three States of Matter



- Particles in a solid are tightly packaged sually in a regular pattern.
 Particles in a solid will vibrate but
- cannot move past each other.
- Solids retain their shapes.



- Particles in a liquid are close together with no regular pattern.
- Particles in a liquid flow and can easily move or slide past one another.
- Liquids assume the shape of their containers.



- Particles in a gas are well separated with no regular pattern.
- Particles in a gas vibrate freely at high speeds.
- Gasses assume the shapes of their containers.
- 6. Look at the picture of exercise 4 and describe the properties of different states of matter:
- 7. Read about properties of mercury, put 3 questions, and discuss them with your groupmates: (Latin pronunciation: /haɪˈdɹɑː(ɹ)d͡ʒzɹəm/)



If we were to cool liquid mercury to its freezing point of -39oC-39oC, and under the right pressure conditions, we would notice all of the liquid particles would go into the solid state. Mercury can be solidified when its temperature is brought to its freezing point. However, when returned to room temperature conditions, mercury does not exist in solid state for long, and returns back to its more common liquid form.

A familiar liquid is mercury metal. Mercury is an anomaly. It is the only metal we

know of that is liquid at room temperature. Mercury also has an ability to stick to itself (surface tension) - a property all liquids exhibit. Mercury has a relatively high surface tension, which makes it very unique. If we heat liquid mercury to its boiling point of 357oC357oC, and under the right pressure conditions, we would notice all particles in the liquid state go into the gas state.

8. Read the text, put 3 questions to it, discuss it with your groupmates:





Plasma has neither a definite volume nor a definite shape. Plasma often is seen in ionized gases, but it is distinct from a gas because it possesses unique properties. Free electrical charges (not bound to atoms or ions) cause the plasma to be electrically conductive. The plasma may be formed

by heating and ionizing a gas. <u>Examples of plasma</u> include stars, lightning, fluorescent lights, and neon signs.

9. Answer the questions for summary:

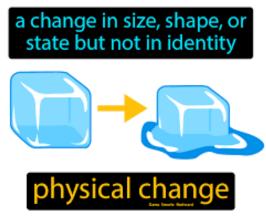


- 1) What states does matter exist in?
- 2) What do the state of a given substance exhibit?
- 3) What characteristics have solids?
- 4) What characteristics have liquids?
- 5) What characteristics have gases?

Lesson 3 Physical Changes

(From Libre Texts. Chemistry. Retrieved from:

<u>https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM100_-</u> <u>Fundamentals of Chemistry/01%3A_The Chemical_World/1.7%3A_Physical_and_Chemical_Changes</u>



A physical change is a change to a sample of matter in which some properties of the material change, but the identity of the matter does not. Melting is an example of a physical change.

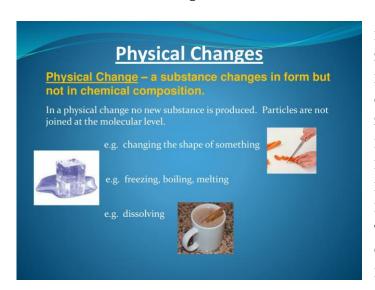
Physical changes can further be classified as reversible or irreversible. The melted ice cube may be refrozen, so melting is a reversible physical change. Physical changes that involve a change

of state are all reversible. Other changes of state include vaporization (liquid to gas), freezing (liquid to solid), and condensation (gas to liquid).

Dissolving is also a reversible physical change. When salt is dissolved into water, the salt is said to have entered the aqueous state. The salt may be regained by boiling off the water, leaving the salt behind.

When a piece of wood is ground into sawdust, that change is irreversible since the sawdust could not be reconstituted into the same piece of wood that it was before. Cutting the grass or pulverizing a rock would be other irreversible physical changes. Firewood also represents an irreversible physical change since the pieces cannot be put back together to form the tree.

1. Find the equivalents in the text:



Зразок матерії, матеріальної властивості зміни, ідентичність матерії, плавлення (танення), оборотні зміни, незворотні зміни. зміна стану, випаровування, замерзання, конденсація, розчинення, водний стан, бути відновленим, подрібнити у бути відтвореним, тирсу, скошування трави, подрібнення каменю, дрова.

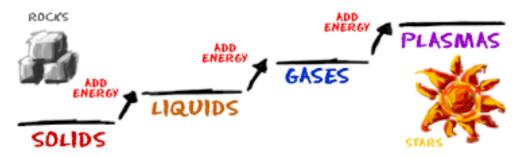
2. Translate the following terms and expressions:

Physical change, material change, identity of the matter, melting, reversible change, irreversible change, vaporization, freezing, condensation, dissolving, aqueous state, salt, wood, sawdust, firewood.

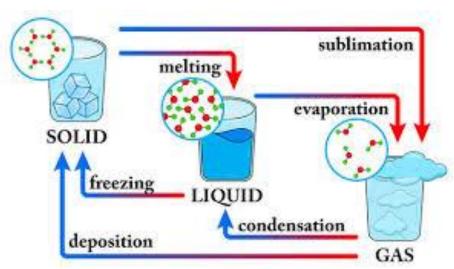
3. Match the notions and their definitions:

Melting	a phase transition where a liquid turns into a solid when its
	temperature is lowered below its freezing point
Vaporization	the change of the state of matter from the gas phase into the
_	liquid phase, and is the reverse of vaporization
Freezing	a phase transition from the liquid phase to vapour
Condensation	the process of changing something from a solid into a liquid
Dissolving	the process where a solute in gaseous, liquid, or solid phase
	dissolves in a solvent to form a solution

4. Look at the schemes and describe the changes of matter:

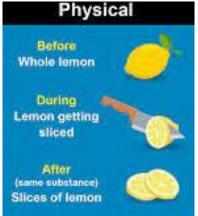


THE STATE OF MATTER CHANGES AS YOU ADD MORE ENERGY



5. Complete the sentences using the following words:

Form, melting of ice, back, sharpening a pencil, composition, original form, substance,



1) Physical change is the change affecting the ______ of a chemical substance, but not its chemical _____.

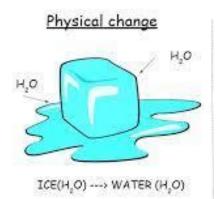
2) Reversible physical change is the change in which the original

____can be

recovered ______.

- 3) Example of reversible change involves
- 4) An irreversible change is when something cannot be changed back to its
- 5) An example of irreversible physical change is

6. Read the text, put 3 questions to it, discuss it with your groupmates:



Changing state of matter is the process of turning solid into gas or liquid, and vice versa. Everything we see is made of matter, and this matter can change state with the addition or removal of heat.

Matter changes state in various ways:

- Melting changing from solid to liquid
- Freezing changing from a liquid to a solid
 - Vapourisation changing from

liquid to gas

- Condensation changing from gas to a liquid
- Deposition changing from gas to a solid
- Sublimation changing from a solid to gas

These examples of changing states of matter all occur due to a change in temperature. For example, when the temperature increases, ice (a solid) will melt and return to water (a liquid).

7. Look at the picture, discuss the examples of physical change, determine which changes are reversible and irreversible and why, add your examples:



8. Answer the questions for summary:



- 7) What is melting?
- 8) What is vaporization?
- 9) What is freezing?
- 10) What is condensation?
- 11) What is dissolving?

- 1) What is physical change?
- 2) How are physical changes classified?
- 3) What is reversible physical change?
- 4) What are the examples of reversible physical change?
- 5) What is irreversible physical change?
- 6) What are the examples of irreversible physical change?

Lesson 4 Chemical Changes

(From Libre Texts. Chemistry. Retrieved from:

<u>https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM100_-</u> <u>Fundamentals_of_Chemistry/01%3A_The_Chemical_World/1.7%3A_Physical_and_Chemical_Changes</u>)</u>

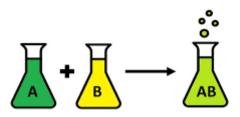


A chemical property describes the ability of a substance to undergo a specific chemical change. A chemical property of iron is that it is capable of combining with oxygen to form iron oxide, the chemical name of rust. A more general term for rusting and other similar processes is corrosion. Other terms that are commonly used in descriptions of chemical changes are burn, rot, explode, and ferment. Chemical properties are very useful as a way of identifying substances. However, unlike physical properties, chemical properties can only be

observed as the substance is in the process of being changed into a different substance.

A chemical change is also called a chemical reaction. A chemical reaction is a process that occurs when one or more substances are changed into one or more new substances. Zinc (Zn)(Zn) is a silver-gray element that can be ground into a powder. If zinc is mixed at room temperature with powdered sulphur (S)(S), a bright yellow element, the result will simply be a mixture of zinc and sulphur. No chemical reaction occurs. However, if energy is provided to the mixture in the form of heat, the zinc will chemically react with the sulphur to form the compound zinc sulphide (ZnS)(ZnS).

1. Find the English equivalents in the text:



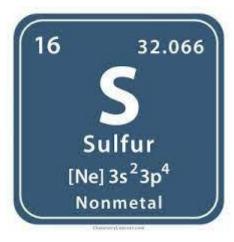
Хімічна властивість, здатність речовини, зазнавати хімічних змін, з'єднуватися утворити оксид заліза, киснем, горіння, гниття, вибух, іржа, бродіння, сріблясто-сірий елемент, порошкоподібна яскраво сірка, жовтий елемент, надати енергію енергією), сульфід (забезпечити

цинку.

2. Translate the following terms and expressions:



Chemical property, chemical change, iron, oxygen, iron oxide, rust, corrosion, burn, rot, explode, ferment, physical property, chemical reaction, Zinc, Sulphur, zink sulphide.



3. Read and remember the spelling information:

Sulfur and sulphur are both English terms. Sulfur is predominantly used in American (US) English while sulphur is predominantly used in British English.

Sulfide and sulphide are both English terms. Sulfide is predominantly used in American English while sulphide is predominantly used in British English.

4. Match the notions with their definitions:

Iron	an iron oxide, a usually reddish-brown oxide formed by the
	reaction of iron and oxygen in the catalytic presence of water or
	air moisture
Oxygen	a high-temperature exothermic redox chemical reaction between a
	fuel (the reductant) and an oxidant
Rust	the process by which dead organic substances are broken down
	into simpler organic or inorganic matter
Burn	the chemical element with the symbol O and atomic number 8
Rot	metabolic process that produces chemical changes in organic
	substances through the action of enzymes
Explode	a chemical element with the symbol Fe (from Latin ferrum 'iron')
	and atomic number 26
Ferment	a compound or mixture which, upon the application of heat or
	shock, decomposes or rearranges with extreme rapidity, yielding
	much gas and heat

5. Complete the sentences:

1)	A ch	nemical	proper	ty de	scrib	es the ab	ility	of a su	bstar	nce to un	ndergo
	a spe	cific									
2)	Rust	is the c	commo	n nai	me f	for the ch	emic	cals tha	at res	ult whe	n iror
	react	s with _				anc	1				
3)	The	terms	used	in	desc	criptions	of	chem	ical	change	es are
4)	Chan	missl sh		- 100	0011						·
		nical ch	_								
5)	A	chemic	al re	eactio	n	happens	W	hen	one	or	more
					are	changed	l in	to one	e or	more	othe

6. Agree or disagree with the statements:

- 1) Chemical properties are very useful as a way of identifying substances.
- 2) Physical properties can only be observed as the substance is in the process of being changed into a different substance.
- 3) A physical change is also called a chemical reaction.
- 4) If zinc is mixed at room temperature with powdered sulphur (S)(S), the result will simply be a mixture of zinc and sulphur.
- 5) If energy is provided to the mixture in the form of heat, the zinc will chemically react with the sulphur to form the compound zinc sulphide.

7. Look at the pictures, name chemical changes, give your examples:



8. Answer the questions for summary:

1) What is chemical change?

- 2) What does a chemical property describe?
- 3) What is chemical property of iron?
- 4) What terms are used in description of chemical changes?
- 5) What is a chemical reaction?
- 6) Describe the process of rust / burn / rot / explode / ferment.

Lesson 5 Chemical Reactions

Recognizing Chemical Reactions

(From Libre Texts. Chemistry. Retrieved from:

https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM100_-Fundamentals_of_Chemistry/01%3A_The_Chemical_World/1.7%3A_Physical_and_Chemic

<u>Fundamentals_of_Chemistry/01%3A_The_Chemical_World/1.7%3A_Physical_and_Chemical_Changes</u>

How can you tell if a chemical reaction is taking place? Certain visual clues indicate that a chemical reaction is likely (but not necessarily) occurring, including the following examples:

- 1. A change of colour occurs during the reaction.
- 2. A gas is produced during the reaction.
- 3. A solid product, called a precipitate, is produced in the reaction.
- 4. A visible transfer of energy occurs in the form of light as a result of the reaction.





When zinc reacts with hydrochloric acid, the reaction bubbles vigorously as hydrogen gas is produced (see figure below). The production of a gas is also an indication that a chemical reaction may be occurring.

When a colourless solution of lead (II) nitrate is added to a colorless solution of potassium iodide, a yellow solid called a precipitate is instantly produced (see figure below). A precipitate is. The formation of a precipitate may also indicate the occurrence of a chemical reaction.

 $Pb(NO3)2(aq)+2KI(aq) \rightarrow PbI2(s)+2KNO3(aq)(1.7.3)$

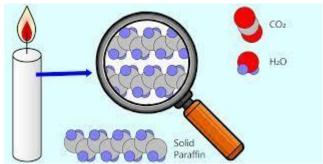
1. Find the English equivalents in the text:

Візуальні підказки, ймовірно відбуватися (проходити), зміна кольору, твердий продукт, осад, видима передача енергії, соляна кислота, інтенсивно бурлити, газоподібний водень, вироблення газу, безбарвний розчин, нітрату свинцю, йодид калію, тверда речовина, осад, осідати з рідкої суміші.

2. Translate the following terms and expressions:

Chemical reaction, gas, solid product, precipitate, energy, light, zinc, hydrochloric acid, colourless solution, lead nitrate, potassium iodide, liquid mixture.

3. Agree or disagree with the statements:



- 1) Certain visual clues always indicate that a chemical reaction is occurring.
- 2) The production of a gas is an indication of physical change.
- 3) The formation of a precipitate is an indication of a chemical reaction.
- 4) Lead nitrate is a coloured solution.
- 5) Potassium iodide is a colourless solution.

4. Match the notions with their definitions:

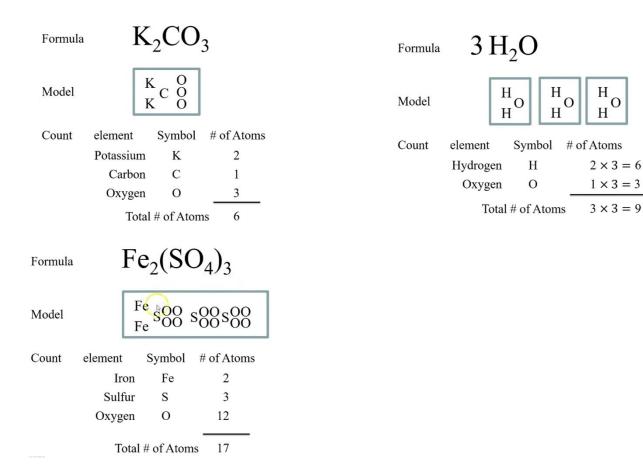
Chemical reaction	the substance produced at the end of the reaction
Reactant	a solid product that forms from a reaction and settles out of
	a liquid mixture
Product	a process that leads to the chemical transformation of one
	set of chemical substances to another
Precipitate	the substance that goes into a chemical reaction

5. Read the information, watch the video, look at the pictures, read the formulas:

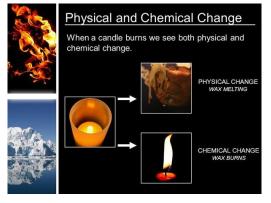
Each element is represented by its atomic symbol in the Periodic Table – e.g. H for hydrogen, Ca for calcium. If more than one atom of a particular element is present, then it's indicated by a number in subscript after the atomic symbol — for example, H2O means there are 2 atoms of hydrogen and one of oxygen.

How to read chemical formulas?

https://www.google.com/search?q=how+to+read+chemical+formulas&oq=how+to+read+chemical+&aqs=chrome.2.69i57j0i512j0i22i30l8.11176j0j7&sourceid=chrome&ie=UTF-8#kpvalbx= RvveZM30C8adkgW1rIKABw 4



6. Read about a burning candle, compare physical and chemical changes, put 2 questions, and discuss them with your groupmates:

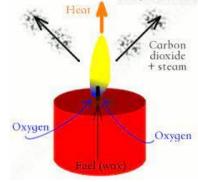


AA burning candle is the best example of physical and chemical change. Take a candle and light it. As time passes, we can observe that the candle changes to wax. If you cover the candle with a jar, it will extinguish.

In the demonstration, burning of the

candle is a chemical change while

conversion of the candle to wax is a physical change. In a physical change, there is basically a change of state of the substance but in the case of a chemical change mostly a new substance is formed in which either energy is given off or absorbed. Thus, we can

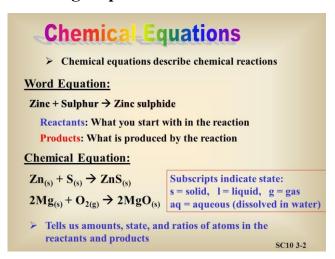


Η

Η

conclude that chemical changes are accompanied by certain physical changes.

7. Read the text, put 3 questions to it and discuss it with your groupmates:



The reaction between zinc and sulfur can be depicted in something called a chemical equation. In words, we could write the reaction as:

zinc+sulfur→zincsulfide zinc+sulfur→zinc sulfide

A more convenient way to express a chemical reaction is to use the symbols and formulas of the substances involved:

$$Zn+S\rightarrow ZnS$$
 $Zn+S\rightarrow ZnS$

The substance(s) to the left of the arrow in a chemical equation are called reactants. A reactant is a substance that is present at the start of a chemical reaction. The substance(s) to the right of the arrow are called products. A product is a substance that is present at the end of a chemical reaction. In the equation above, zinc and sulfur are the reactants that chemically combine to form zinc sulfide as a product.

8. Answer the following questions for summary:

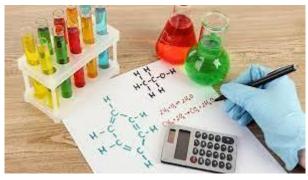


- 1) What is chemical reaction?
- 2) What are visual clues of chemical reaction?
- 3) Do the visual clues of chemical reaction indicate that reaction is necessarily occurring?
- 4) What is reactant?
- 5) What is product?
- 6) What is precipitate?
- 7) What can we see when zinc reacts with hydrochloric acid?
- 8) What is produced when a colourless solution of lead (II) nitrate is added to a colorless solution of potassium iodide?
- 9) How many atoms are in \hat{H}_2O ?

UNIT II CHEMISTRY SUBDISCIPLINES

Lesson 1 Analytical Chemistry

(From What Branch of Chemistry is Analytical Chemistry? Retrieved from: https://www.gcu.edu/blog/medical-studies-sciences/what-branch-chemistry-analytical-chemistry)



Chemistry is the branch of science that studies matter and its organization into substances, as well as the properties of substances and how they interact with each other throughout the universe. Analytical chemistry is focused on identifying what substances and how much of

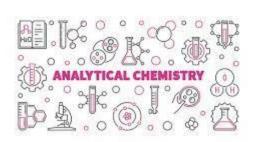
them are present in a sample of matter.

Analytical chemistry is the study of chemical characterization of matter. It provides the methods and tools to deduce the qualitative, spatial, quantitative, and speciation aspects of analytical science.

An analytical chemist is a scientist who studies the composition and structure of matter. Working in a lab, analytical chemists perform experiments to determine the chemical composition of various substances, and how those substances behave under various conditions.

An analytical chemist may sometimes need to handle potentially hazardous and otherwise dangerous chemicals. Because of this, it is of the utmost importance that these professionals strictly adhere to all lab safety procedures and protocols at all times.

1. Find the English equivalents:



Властивості речовини, взаємодіяти один з одним, зосереджуватися на визначенні, зразок речовини, вивести якісний аспект, просторовий аспект, кількісний аспект, видовий аспект, склад речовини, проводити експеримент, визначити хімічний склад, поводитися в різних умовах, працювати з небезпечними хімічними речовинами,

суворо дотримуватися процедури, лабораторна безпека.

2. Translate the following terms and expressions:



Analytical chemistry, branch of science, properties of substance, sample of matter, tool, structure of matter, analytical chemist, to perform an experiment, hazardous chemical, dangerous chemical, to strictly adhere, lab safety.

3. Complete the sentences:

Hz 1 - 2n- (120)	1) Chemistry deals with the properties, and
1-0	of
1940 3	substances.
COS VI CR	2) Analytical chemistry focuses on
	what
113240	substances and how much of them are
CHTCHIC	present in .
(6)	$\frac{1}{3}$ is
the study of chemical characteriz	zation of matter.
4) Analytical chemist studies	and
of m	natter.
5) Analytical chemists	experiments and
determine	of various substances.
6) An analytical chemist may work	with
chemicals.	

4. Match the notions with their definitions:

Quantitative	the determination of non-numerical information about a
analysis	chemical species, a reaction, etc.
Spatial	the analytical activities of identifying and/or quantifying one
analysis	or more individual chemical species in a sample
Quantitative	he determination of the absolute or relative abundance (often
analysis	expressed as a concentration) of one, several or all particular
	substance(s) present in a sample
Speciation	a variety of techniques using different analytic approaches,
analysis	especially spatial statistics

5. Read the extract and say what fields use the data of analytical chemistry:



Analytical chemists may run experiments and analyze the results, but their work has significant implications for the world outside the lab. Their work can extend to the following:

- In medicine, enable physicians to diagnose diseases more accurately
- Develop pharmaceutical applications that help patients achieve better quality of life
- Assess nutritional value and safety of food
- Assess environmental quality by monitoring the chemical composition of soil, water and air to track for suspected contaminants
- In industry, test materials to ensure that they have proper composition and structure
- Provide pathways for greater innovation in trade and commerce

6. Read the extract and say where analytical chemists work and what the responsibilities of an analytical chemists are:



Analytical chemists are most often found in laboratories. They may work at independent labs, major corporations (e.g., pharmaceutical and food manufacturers), educational institutions and even government agencies. Analytical chemists are hired by a range of industries, from pharmaceuticals to petroleum.

A typical analytical chemist job description might list responsibilities such as the following:

- Prepare, test and analyze samples of matter to identify its individual components
 - Apply scientific techniques to sample testing
- Explore potential uses for substances in various industries, including pharmaceuticals, cosmetics and agricultural
- Maintain detailed laboratory records that explain testing techniques and findings
 - Conduct evidence-based research
- Develop reports on lab findings and prepare research for publication

7. Look at the slide, put 2 questions to it, discuss it with your groupmates:



Introduction

- Analytical Chemistry deals with methods for determining the chemical composition of samples.
 - Qualitative Analysis (identification) provides information about the identity of species or functional groups in the sample (an analyte can be identified).
 - Quantitative Analysis provides numerical information of analyte (quantitate the exact amount or concentration).

8. Answer the questions for a summary:



- 1) What does chemistry study?
- 2) What does analytical chemistry focus on?
- 3) What does an analytical chemist study?
- 4) Where does an analytical chemist work?
- 5) What are the responsibilities of an analytical chemist?
- 6) What fields use the data of analytical chemistry?
- 7) Why is it important to strictly adhere lab safety procedures and protocols?

Lesson 2 Inorganic Chemistry

(From Inorganic Chemistry (journal). Retrieved from:

https://en.wikipedia.org/wiki/Inorganic_chemistry

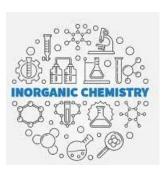


Inorganic chemistry deals with synthesis and behaviour of inorganic and organometallic compounds. This field covers chemical compounds that are not carbon-based, which are the subjects of organic chemistry. The distinction between the two disciplines is far from absolute, as there is much overlap in the subdiscipline of organometallic chemistry.

It has applications in every aspect of the chemical industry, including catalysis, materials science, pigments, surfactants, coatings, medications, fuels, and agriculture.

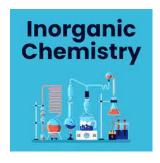
Many inorganic compounds are ionic compounds, consisting of cations and anions joined by ionic bonding. Important classes of inorganic compounds are the oxides, the carbonates, the sulfates, and the halides. Many inorganic compounds are characterized by high melting points. Many inorganic compounds have high melting point and ease of crystallization. Some salts (e.g., NaCl) are very soluble in water, others (e.g., FeS) are not.

1. Find the English equivalents in the text:



Займатися синтезом, поведінка металоорганічних сполук, хімічна сполука, не містити вуглецю, значно збігатися, мати застосування, хімічна промисловість, каталіз, матеріалознавство, пігменти, поверхнево-активні речовини, покриття, ліки, паливо, сільське господарство, іонна сполука, складатися з катіонів та аніонів, іонний зв'язок, оксиди, карбонати, сульфати та галогеніди, висока температура плавлення,

легкість кристалізації, бути розчинним у воді.



2. Translate the following terms and expressions:

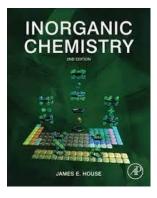
Inorganic compound, organometallic compound, chemical compound, carbon-based compound, organometallic chemistry, chemical industry, catalysis, materials science, pigments, surfactants, coatings, medications, fuels, agriculture, ionic compound, cation,

anion, ionic bonding, oxide, carbonate, sulfate, halide, high melting point, ease of crystallization, to be soluble in water.

3. Match the notions with their definitions:

Catalysis	an interdisciplinary field of researching and discovering
	materials
Material	coloured, black, white or fluorescent particulate organic or
Science	inorganic solid, which is insoluble in, and essentially physically
	and chemically unaffected by, the vehicle or substrate in which it
	is incorporated
Pigment	chemical compound that decreases the surface tension or
	interfacial tension between two liquids, a liquid and a gas, or a
	liquid and a solid
Surfactants	a covering that is applied to the surface of an object, usually
	referred to as the substrate
Coatings	a medicine or a chemical compound used to treat or cure illness
Medications	any material that can be made to react with other substances so
	that it releases energy as thermal energy or to be used for work
Fuels	the modification of the rate of a chemical reaction, usually an
	acceleration, by addition of a substance not consumed during the
	reaction

4. Mathe the notions (1-4) with their definitions (a-d):



- 1) oxide
- 2) carbonate
- 3) sulfate
- 4) halide
- a) a salt of carbonic acid (H₂CO₃), characterized by the presence of the carbonate ion, a polyatomic ion with the formula CO₂₋₃
- b) a polyatomic anion with the empirical formula SO₂₋₄
- c) a binary chemical compound, of which one part is a halogen atom and the other part is an element or radical that is less electronegative (or more electropositive) than the halogen
- d) chemical compound containing at least one oxygen atom and one other element in its chemical formula

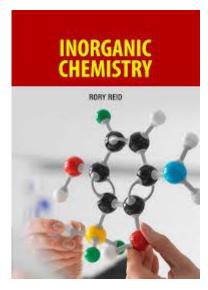
5. Look at the slide and say what inorganic chemistry is and what inorganic compounds are:

Inorganic chemistry is the study of the production, reactions, and properties of chemical compounds



that do not involve a carbon-hydrogen bond. **Inorganic** compounds can be classified as acids, bases, salts, and oxides.

6. Read the text, write down chemical terms, put 2 questions to the text and discuss them with your groupmates:



Inorganic compounds are found in nature as minerals. Soil may contain iron sulfide as pyrite or calcium sulfate as gypsum. Inorganic compounds are also found multitasking as biomolecules: as electrolytes (sodium chloride), in energy storage (ATP) or in construction (the polyphosphate backbone in DNA).

The first important man-made inorganic compound was ammonium nitrate for soil fertilization through the Haber process. Inorganic compounds are synthesized for use as catalysts such as vanadium(V) oxide and titanium(III) chloride, or as reagents in organic chemistry such as lithium

aluminium hydride.

7. Read the text, write down chemical terms, put 2 questions to the text and discuss them with your groupmates:

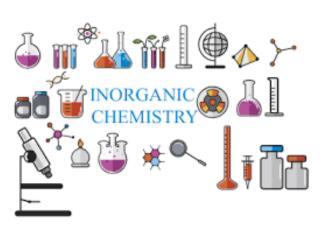


Inorganic Chemistry

Subdivisions of inorganic chemistry are organometallic chemistry, cluster chemistry and bioinorganic chemistry. These fields are active areas of research in inorganic chemistry, aimed toward new catalysts, superconductors, and therapies.

Inorganic chemistry is a highly practical area of science. Traditionally, the scale of a nation's economy could be evaluated by their productivity of sulfuric acid. The manufacturing of fertilizers, which often begins with the Haber-Bosch process, is another practical application of industrial inorganic chemistry.

8. Answer the questions for a summary:



- 1) What does inorganic chemistry deal with?
- 2) What chemical compounds does inorganic chemistry involve?
- 3) What do ionic compounds consist of?
- 4) What are the important classes of inorganic compounds?
- 5) What are many inorganic compounds characterized by?
- 6) Where are inorganic compounds found?
- 7) What was the first important man-made inorganic compound?
- 8) What are subdivisions of inorganic chemistry?
- 9) What is practical application of industrial inorganic chemistry?

Lesson 3 Organic Chemistry

(From Organic Chemistry. Retrieved from: https://courses.lumenlearning.com/suny-potsdam-organicchemistry//chapter/1-1-introduction-to-organic-chemistry/)



Organic chemistry is the study of the chemistry of carbon compounds. Carbon is singled out because it has a chemical diversity unrivaled by any other chemical element. Its diversity is based on the following:

• Carbon atoms bond reasonably strongly with

other carbon atoms.

- Carbon atoms bond reasonably strongly with atoms of other elements.
- Carbon atoms make many covalent bonds (four).

Curiously, elemental carbon is not particularly abundant. It does not even appear in the list of the most common elements in Earth's crust. Nevertheless, all living things consist of organic compounds.

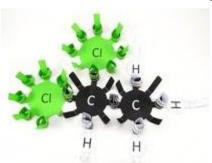
Most organic chemicals are covalent compounds. By convention, compounds containing carbonate ions and bicarbonate ions, as well as carbon dioxide and carbon monoxide, are not considered part of organic chemistry, even though they contain carbon.

1. Find the English equivalents in the text:



Сполуки вуглецю, бути виділеним, хімічне розмаїття, бути неперевершеним, бути заснованим, міцно зв'язуватися, утворювати ковалентні зв'язки, бути поширеним, земна кора, тим не менше, згідно з умовами (за домовленістю), містити карбонат-іони, вуглекислий газ, оксид вуглецю.

2. Translate the following words and word-combinations:

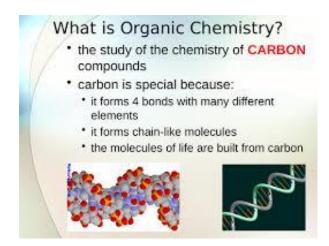


Organic chemistry, carbon compound, chemical diversity, chemical element, carbon atom, to bond, abundant element, common element, organic compound, covalent compound, carbonate ions, bicarbonate ions, carbon dioxide, carbon monoxide.

3. Match the notions with their definitions:

Carbon	CO ₂ - a colorless and non-flammable gas at normal
	temperature and pressure
Carbon compound	CO - an odorless, colorless gas formed by the incomplete
_	combustion of fuels
Carbon dioxide	a chemical element with the symbol C and atomic number
	6
Carbon monoxide	generally results from two nonmetals reacting with each
	other
Covalent	chemical substance containing carbon
compound	

4. Look at the slides, give the definition of organic chemistry, reasons why carbon is special, and examples of organic compounds.



Organic Chemistry - Introduction

- Organic chemistry is the study of carbon compounds. It's the most versatile element on the table!
- Animals, plants, and other forms of life consist of organic compounds.
 - Nucleic acids, proteins, fats, carbohydrates, enzymes, vitamins, and hormones are all organic compounds.

5. Look at the slide, put 3 questions to the information and discuss it with your groupmates:

Introduction to Organic Chemistry

Organic chemistry is the study of compounds that contain the element carbon.

- Organic chemicals affect virtually every facet of our lives.
- Products such as clothes, foods, medicines, gasoline, refrigerants, and soaps are composed almost solely of organic compounds.
- Because organic compounds are composed of covalent bonds, their properties differ a great deal from those of ionic inorganic compounds.



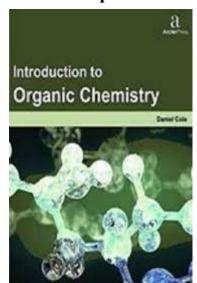
6. Read the text, write down new words, put 3 questions to the text, discuss it with your groupmates:



The simplest organic compounds are the hydrocarbons, compounds composed of carbon and hydrogen atoms only. Some hydrocarbons have only single bonds and appear as a chain (which can be a straight chain or can have

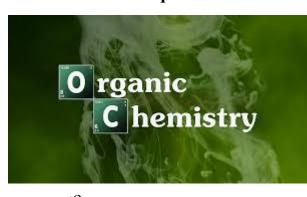
branches) of carbon atoms also bonded to hydrogen atoms. These hydrocarbons are called alkanes (saturated hydrocarbons). Each alkane has a characteristic, systematic name depending on the number of carbon atoms in the molecule. These names consist of a stem that indicates the number of carbon atoms in the chain plus the ending —ane. The stem meth— means one carbon atom, so methane is an alkane with one carbon atom. Similarly, the stem eth— means two carbon atoms; ethane is an alkane with two carbon atoms. Continuing, the stem propmeans three carbon atoms, so propane is an alkane with three carbon atoms.

7. Complete the sentences:



- 1) Organic chemistry is the study
- of_____.
- 2) Carbon is a chemical element with
- 3) Elemental carbon is not
- 4) Carbon atoms bond
- 5) All living things consist of
- 6) Most organic chemicals are
- 7) Covalent compound generally result from

8. Answer the questions for a summary:



- 1) What does organic chemistry study?
- 2) Why is carbon singled out?
- 3) What facts is carbon diversity based on?
- 4) Is carbon abundant element?
- 5) Is carbon in the list of the most common elements in Earth's

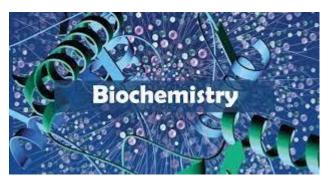
crust?

- 6) What compounds are most organic chemicals?
- 7) What is carbon compound?
- 8) What is not considered part of organic chemistry by convention?
- 9) What products are composed solely of organic compounds?
- 10) What are the simplest organic compounds?

Lesson 4 Biochemistry

(From Biochemistry Science. Retrieved from:

https://www.britannica.com/science/biochemistry)



Biochemistry is the study of the chemical substances and processes that occur in plants, animals, and microorganisms and of the changes they undergo during development and life. It deals with the chemistry of life, and as such it draws on the techniques of analytical,

organic, and physical chemistry, as well as those of physiologists concerned with the molecular basis of vital processes.

All chemical changes within the organism—either the degradation of substances, generally to gain necessary energy, or the buildup of complex molecules necessary for life processes—are collectively called metabolism. These chemical changes depend on the action of organic catalysts known as enzymes. Enzymes, in their turn, depend for their existence on the genetic apparatus of the cell. It is not surprising, therefore, that biochemistry enters the investigation of chemical changes in disease, drug action, and other aspects of medicine, as well as in nutrition, genetics, and agriculture.

1. Find the English equivalents in the text:



Хімічна речовина, мікроорганізм, розвиток, мати справу з, спиратися на методи, молекулярна основа, життєво важливий процес, деградація речовини, отримати енергію, органічний каталізатор, фермент, харчування, сільське господарство.

2. Translate the following terms and expressions:

Biochemistry, chemical substance, analytical chemistry, organic chemistry, physical chemistry, physiologist, molecular basis, vital process, complex molecule, organic catalyst, enzyme, genetic apparatus, cell, disease, drug action, medicine, nutrition, genetics, agriculture.

3. Match the notions with their definitions:

Medicine	the biochemical and physiological process by which an organism
	uses food to support its life

Nutrition	the art and science of cultivating the soil, growing crops, and
	raising livestock
Genetics	the science and practice of caring for a patient, managing the
	diagnosis, prognosis, prevention, treatment, palliation of their
	injury or disease, and promoting their health
Agriculture	the scientific study of genes and heredity

4. Agree or disagree with the statements:



- 1) Biochemistry studies the chemical substances, processes, and transformation in them.
- 2) Biochemistry deals with the

chemistry of life.

- 3) Metabolism refers to the chemical (metabolic) processes that take place as your body converts foods and drinks into energy.
- 4) Enzymes are proteins that act as biological catalysts by accelerating chemical reactions.
- 5) Enzymes do not depend for their existence on the genetic apparatus of the cell.
- 5. Read and translate the slide. Say what biochemistry is:

What is Biochemistry?

- · Biochemistry = chemistry of life.
- Biochemists use physical and chemical principles to explain biology at the molecular level.
- Basic principles of biochemistry are common to all living organism
- 6. Read about the term of biochemistry and name some new facts you have known:



The term biochemistry is synonymous with two somewhat older terms: physiological chemistry and biological chemistry. Those aspects of biochemistry that deal with the chemistry and function of very large molecules (e.g., proteins and nucleic acids) are often grouped under the term molecular biology.

Biochemistry is a young science, having been known under that term only since about 1900. Its origins, however, can be traced much further back; its early history is part of the early history of both physiology and chemistry.

7. Read the text, write down new words, put 3 questions and discuss them with your groupmates:



A description of life at the molecular level includes a description of all the complexly interrelated chemical changes that occur within the cell—i.e., the processes known as intermediary metabolism.

The processes of growth, reproduction, and heredity, also subjects of the biochemist's curiosity,

are intimately related to intermediary metabolism, and cannot be understood independently of it.

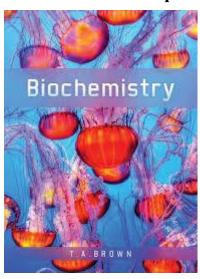
The properties and capacities exhibited by a complex multicellular organism can be reduced to the properties of the individual cells of that organism, and the behaviour of each individual cell can be understood in terms of its chemical structure and the chemical changes occurring within that cell.

8. Look at the slide and say about the application of biochemistry:

18.1 An Introduction to Biochemistry

- Biochemistry is the study of molecules and their reactions in living organisms.
- Physicians are faced with biochemistry every day; all diseases are associated with abnormalities in biochemistry.
- Nutritionists evaluate dietary needs based on biochemistry.
- The pharmaceutical industry designs molecules that mimic or alter the action of biomolecules.
- The goal of biochemistry is to understand the structures of biomolecules and the relationship between their structures and functions.

9. Answer the questions for a summary:

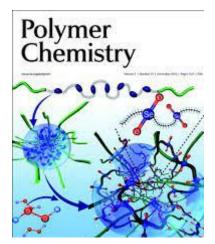


- 1) What does biochemistry study?
- 2) What does biochemistry deal with?
- 3) What changes are called metabolism?
- 4) What do these chemical changes depend on?
- 5) What is enzyme?
- 6) What fields does biochemistry have application in?
- 7) What do biochemists use to explain biology at the molecular level?
- 8) Is biochemistry an old science?
- 9) What are the subjects of the biochemist's curiosity?
- 10) What is the goal of biochemistry?

Lesson 5 Polymer Chemistry

(From Polymer Chemistry. Retrieved from:

https://www.britannica.com/science/polymer)



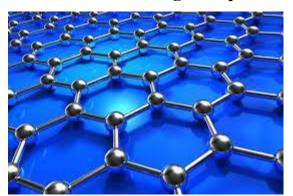
Polymer chemistry is a subdiscipline of chemistry that focuses on the structures of chemicals, chemical synthesis, and chemical and physical properties of polymers and macromolecules.

Any of a class of natural or synthetic substances composed of very large molecules, called macromolecules, that are multiples of simpler chemical units called monomers. Polymers make up many of the materials in living organisms, including, for example, proteins, cellulose, and nucleic acids. Moreover, they constitute the basis of such minerals

as diamond, quartz, and feldspar and such man-made materials as concrete, glass, paper, plastics, and rubbers.

The word polymer designates an unspecified number of monomer units. When the number of monomers is very large, the compound is sometimes called a high polymer. Polymers are not restricted to monomers of the same chemical composition or molecular weight and structure. Some natural polymers are composed of one kind of monomer. Most natural and synthetic polymers, however, are made up of two or more different types of monomers; such polymers are known as copolymers.

1. Find the English equivalents in the text:



Структура хімічних речовин, хімічний синтез, хімічні властивості, кратним природна речовина, бути простішим хімічним одиницям, білок, целюлоза, нуклеїнова кислота, алмаз, кварц, польовий шпат, concrete, glass, paper, plastics, rubbers, позначати, невизначена кількість, мономерна високополімер, молекулярна ланка, маса, кополімер (співполімер).

2. Translate the following terms and expressions;



Chemical synthesis, physical property, polymer, macromolecule, synthetic substance, chemical unit, monomer, proteins, cellulose, nucleic acids, proteins, cellulose, nucleic acids, concrete, glass, paper, plastics, rubbers, high polymer, molecular weight, molecule structure, copolymer.

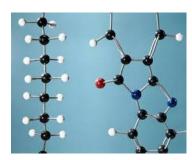
3. Match the notions with their definitions:

Monomer	any of a class of natural or synthetic substances composed of very				
	large molecules, called macromolecules, which are multiples of				
	simpler chemical units called monomers				
Polymer	a polymer derived from more than one species of monomer				
Copolymer	a substance (such as polystyrene) consisting of molecules that are				
	large multiples of units of low molecular weight				
High	a molecule of any class of compounds, mostly organic, that can				
polymer	react with other molecules to form very large molecules, or				
	polymers				

4. Complete the following sentences:

1)	Polymer chemistry is the study of the synt	thesis	s, ch	naracte	rizatior	ı, and
	properties of					•
2)	A	is	a	very	large	molecule
	important to biological processes, such as	a pro	teir	n or nu	cleic a	eid.
3)	Polymers make up many of the materials	in li	vin	g orga	nisms,	including,

Polymers make up many of the materials in living organisms, including, for example, ______.



- 4) When the number of monomers is very large, the compound is sometimes called a
- 5)_____

are natural and synthetic polymers made up of two or more different types of monomers.

5. Look through the slide and answer the questions:

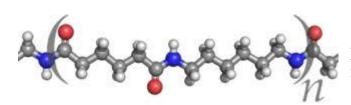
Defining Polymer

- Polymers → Poly (many) + mer (unit)
 - Hence polymer is a macromolecule that is built from smaller unit (monomer)
 - Proteins are built from many amino acids. Proteins are polymers, amino acids are the monomers
- A polymer can be built from the same monomer
- →Homopolymer e.g. Poly(tetrafluoroethene)
- Also can be built from different monomers → Copolymer e.g. ABS (Acrylonitrile-Butadiene-Styrene)

- 1) What does the word polymer mean?
- 2) What is polymer built from?
- 3) What is protein built from?
- 4) Is amino acid a polymer?
- 5) Can a polymer be built from the same monomer?
- 6) What is copolymer?

6. Read the paragraph,

write down new words, put 2 questions and discuss them with your groupmates:



Organic polymers play a crucial role in living things, providing basic structural materials, and participating in vital life processes. For example, the solid parts of all plants are made up

of polymers. These include cellulose, lignin, and various resins. Cellulose is a polysaccharide, a polymer that is composed of sugar molecules. Lignin consists of a complicated three-dimensional network of polymers. Wood resins are polymers of a simple hydrocarbon, isoprene. Another familiar isoprene polymer is rubber.

7. Read the paragraphs, write down new words, put 2 questions and discuss them with your groupmates:



Other important natural polymers include the proteins, which are polymers of amino acids, and the nucleic acids, which are polymers of nucleotides—complex molecules composed of nitrogen-containing bases, sugars, and phosphoric acid. The nucleic acids carry genetic information in the cell. Starches, important sources of food energy derived from plants, are natural polymers composed of glucose.

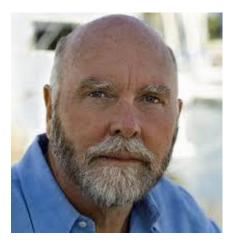
Many inorganic polymers also are found in nature, including diamond and graphite. Both are composed of carbon. In diamond, carbon atoms are linked in a three-dimensional network that gives the material its hardness. In graphite, used as a lubricant and in pencil "leads," the carbon atoms link in planes that can slide across one another.

UNIT III General English

Lesson 1 Meeting People

(from John and Liz Soars. New Headway. English Course. – Oxford University Press, 2000)

1. Read the text about Seumas McSporran ['Jeiməs mək'sporən].



Seumas McSporran is a very busy man. He is 60 years old and he is thirteen jobs. He is a postman, a policeman, a fireman, a taxi driver, a school-bus driver, a boatman, an ambulance man, an accountant, a patrol attendant, a barman, and an undertaker. Also, he and his wife, Margaret, have a shop and a small hotel.

Seumas lives and works on the island of Gigha in the west of Scotland. Only 120 people live on Gigha but in summer 150 tourists come by boat every day.

Every weekday Seumas gets up at 6.00 and makes breakfast for the hotel guests. At 8.00 he drives the island's children to school. At 9.00 he collacts the post from the boat and delivers it to all the houses on the island. He also delivers the beer to the island's only pub. Then he helps Margaret in the shop.

He says: "Margaret likes being busy, too. We never have holidays and we don't like watching television. In the evenings Margaret makes supper and I do the accounts. At 10.00 we have a glass of wine and then we go to bed. Perhaps our life isn't exciting, but we like it."

2. Answer the following questions:

- 1. Where does Seumas live?
- 2. How old is he?
- 3. How many jobs does he have?
- 4. What's his wife's name?
- 5. What does she do?
- 6. How many people live on Gigha?
- 7. How many tourists visit Gigha in summer?
- 8. What does Seumas do in the morning?
- 9. What do he and Margaret do in the evening?

3. Put questions to the following sentences.

- 1. He helps in the shop.
- 2. He makes breakfast for the hotel guests.
- 3. He serves petrol.
- 4. He delivers the beer to the pub.

- 5. He collects the post from the boat.
- 6. He drives the children to school.
- 7. He delivers the letters.
- 8. He has a glass of wine.
- 9. He works as an undertaker.

4. Ask and answer questions with a partner about Seumas's working day.

5. Match a job in A with a line in B.

A	В		
A pilot	designs buildings		
An interpreter	delivers letters		
A nurse	looks after people in hospital		
A barman	looks after money		
An accountant	writes for a newspaper		
A journalist	translates things		
A postman	sells things		
An architect	flies planes		
A shopkeeper	serves drinks		

6. Look at the worksheet and do exercises 1 and 2

(from English ESL Worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/general-topic/people/meeting-new-people/143637):

Language for... Meeting New People



Exercise 1: Ask and answer the questions below with your partner.

- Are you a very <u>sociable</u> person? Do you like to meet and <u>get to know</u> new people?
- 2. Where, or in what situations, do you usually meet new people?
- 3. What common questions do people ask each other when they first meet?
- 4. What kind of topics or questions are considered inappropriate when you first meet someone?
- 5. Can you explain the meaning of 'small talk'?

you ever been?

Sarah: Not yet, it's on my bucket list.

Exercise 2: Work in pairs and read the dialogues below aloud.

Conversation 1:

Sarah and James meet for the first time at a wedding. They are seated next to each other.

Sarah:	Hi, I'm Sarah.
James:	I'm James. Nice to meet you.
Sarah:	You too. Are you enjoying the day?
James:	Yes, I'm having a great time. I don't know many people, but everyone is very friendly. So, how do you know the bride and groom ?
Sarah:	I was in college with the bride. What about you?
James:	Wow, so you've known them a long time. I recently started working with the groom.
Sarah:	Ah, so that's why I haven't met you yet. You must be a pilot too then?
James:	Yeah.
Sarah:	That's an amazing job. Where do you usually fly to?
James:	Yeah, it is. I'm very lucky. At the moment, I only fly in Europe, but I hope to start long-haul flights next year. What about you? What do you do?
Sarah:	I'm a primary school teacher. It's not as exciting as your job, but it pays the bills.
James:	I'm sure you're kept busy.
Sarah:	Definitely. It's a lot of fun, but the summer break is well-needed.
James:	<u>I bet</u> . So, what do usually do in your free time?
Sarah:	I like to keep active, travel, and write children's books. What about you? Do you have any time for hobbies?
James:	Yeah, I play tennis and love to travel too. I'm planning a trip to South Africa next month. Have

Lesson 2 Where do you live?

1. a) Write the words in the correct column.

An armchair, a fridge, a television, a coffee table, a shelf, a plant, a stereo, a lamp, a cooker, a washing machine, a telephone, a cupboard, a cup, a sofa.

The living room	The kitchen	Both

- b) What is in your living room? Tell a partner.
- c) Helen has a new flat. Describe her living room.



There is a There are

- d) Complete the answers. Practise the questions and the answers.
- 1. Is there a television in the room? Yes, there ...
- 2. Is there a radio in the room? No, there ...
- 3. Are there any books on the shelves? ...
- 4. How many books are there on the shelves? ...
- 5. Are there any photographs in the room? ...
- e) Ask and answer questions about these things.

A dog a fire a rug a cat a mirror a computer a clock

Plants lamps flowers pictures newspapers bookshelves photos

f) Look at the picture of Helen's living room. Complete the sentences with a preposition.

On under next to in front of

- 1. The television is _____ the wall.
- 2. The coffee table is _____ the sofa.
- 3. There are some magazines _____ the table.
- 4. The books are _____ the shelves.
- 5. There are some photos _____ the shelves.
- 6. The armchair is _____ coffee table.
 - 2. Read the text and put 4 questions to it.

Description of a Living Room

There are three people in the living room. A man and a woman are on the sofa; a little girl is in the armchair. There is a radio on the coffee table and a rug under it. There is a cat on the rug in front of the fire. There are a lot of pictures on the walls but there are not any photographs. There are two plants on the floor next to the television and some flowers on the small table next to the sofa.

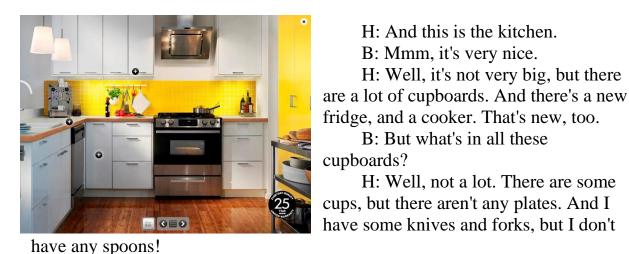
> H: And this is the kitchen. B: Mmm, it's very nice.

B: But what's in all these

H: Well, it's not very big, but there

H: Well, not a lot. There are some

3. Read the conversation of Helen and Bob.



- B: Do you have any glasses?
- H: No, sorry.
- B: Never mind. We can drink this champagne from those cups! Cheers!
- 4. Complete the sentences with *some* or *any*.

1.	In our classroom	n there are books on the floor.
2.	There aren't	plants.
3.	Are there	Spanish students in your class?
4.	There aren't	Chinese students.
5.	We have	dictionaries in the cupboard.
6.	There aren't	pens in my bag.

- 5. What is there in your classroom? Describe it.
- 6. Pierre is a Frenchman on business in Boston. Listen to him describe what's in his briefcase. Tick (+) the things in it.

 a newspaper
 a dictionary
 a sandwich
 pens
a notebook



keysa bus ticketa letterphotosa mobile phonestampsan address book

What's in my briefcase? Well, there's a newspaper – a French newspaper – and there's a dictionary – my French / English dictionary. I have some pens, three, I think. Also I have a notebook for vocabulary, I write words in that every day. And of course I have my keys, my car keys and my house keys. Oh yes, very important, there are some photos of my family, my wife and my daughter and there's my mobile phone. I ring my home in Paris every night. That's all, I think. I don't have any stamps and my address book is in my hotel.

Lesson 3 Letters

1. Dorita is an English student at a school in Queens, New York city. Read her letter to Miguel, her brother in Argentine.



41 Street Sunnyside, New York 11104 October 12

Dear Miguel, How are you? I'm fine. Here's a letter in English. It's good practice for you and me.

I have classes in English at the college. I'm in a class with eight students. They are all from different countries: Japan, Brazil, Switzerland, Poland, and Italy. Our teacher's name is Isabel. She's very nice and a very good teacher.

I live in an apartment with two American girls, Annie and Marnie Kass. They are sisters. Annie is twenty years old and she is a dancer. Marnie is eighteen and she is a student. They are very friendly, but it is not easy to understand them. They speak very fast.

New York is very big, very exciting but very expensive. The subway isn't difficult to use and it's cheap. It's very cold now but Central Park is lovely in the snow. I'm very happy here.

Write to me soon.

Love.

Dorita.

2. Correct the false sentences.

- 1) Dorita is from Argentina.
- 2) She is in Miami now.
- 3) Dorita is happy in New York.
- 4) She is on holiday there.
- 5) It's a very big class.
- 6) The students in her class are all from America.
- 7) Arnie and Marnie are both students.
- 8) The subway is easy to use.

3. Write questions about Dorita's letter.

1)	Argentina.
2)	Japan, Brazil, Switzerland, Poland, and Italy.
3)	They are sisters. They live with Dorita.
4)	Annie's twenty and Marnie's eighteen.
5)	- Yes, it is.

4. Look at the worksheet and do exercises 1 and 2



Writing a letter to a friend

Exercise 1: read my letter.

Dear Naomi,

How are you? Would you like to go to the cinema? There is a film called The Post on Saturday at 5pm.

Please tell me if you can come.

From,

Sarah

Exercise 2: Answer the questions.

1)	Who is the letter written to?
2)	Who is the letter from?
3)	Where are going?
4)	What is the name of the film?
5)	What time does it start?

Lesson 4 Different People

1. Listen to some people from different places. Complete the chart.

Questions	Manola from Lisbon	Ray and Elsie from Toronto	Brad from Malibu	Alise from Samoa
House or flat?				
Old or modern?				
Where?				
How many bedrooms?				
Live(s) with?				
Extra information				



1) Manola from Lisbon

I live in the old town near the sea. It is called the Alfama. I have a very beautiful flat. There's just one room in my flat, one very big room with one very big window. My bed's next to the window so I see the sea and all the lights of the city when I go to sleep. I live alone, but I have a cat and I'm near the shops and

lots of friends come to visit me. I love my flat.



2) Ray and Elsie from Toronto

E: Our house is quite old, about fifty years old. It's quite near to the city centre. We have a living room, quite a big kitchen and three bedrooms, but the room we all love is our family room.

R: Yes, there's a TV and a stereo and a large comfortable sofa in there, and some big, old armchairs.

We love sitting there in winter with the snow outside.

E: Our children aren't at home now, they both have jobs in the USA, so most of the time it's just Ray and me.



3) Brad from Malibu

My house is fantastic. It's right next to the sea. My neighbours are very rich. Some of them are famous film stars. In my house there are ten rooms, five are bedrooms, and everything is white, the floors, the walls, the sofas, everything. I also have a swimming pool, a cinema and an exercise room. I live here alone. I'm not married at the moment. My ex-wife is French. She lives in Paris now

with our three sons.



4) Alise from Samoa

I live with my family in a house near the sea. We have an open house, that is ...our house doesn't have any walls. Houses in Samoa don't have walls because it is very, very hot, but we have blinds to stop the rain and sun. Our house is in the old style. We have only one room for living and sleeping, so it is both a bedroom and a living room. We have rugs and we sit and sleep on the floor.

2. Talk about where you live.

3. Where do people speak these languages?



Model: They speak French in France and also in Canada.

French

Spanish

German

Italian

Portuguese

Japanese

English

4. Answer the questions with *can or can't* and ask your partner to answer them.

Can you ...?

- 1. drive a car
- 2. speak French
- 3. speak Italian
- 4. cook
- 5. play tennis
- 6. ski
- 7. swim

- 8. play the piano
- 9. use a computer

5. What can computers do? Talk about computers with a partner. What can they do? What can't they do?



Can computers ...?

- 1. translate
- 2. write poetry
- 3. speak English
- 4. laugh
- 5. play chess
- 6. hear
- 7. check spellings
- 8. feel
- 9. make music

10.think

11.have conversations

12.fall in love

6. Look at the worksheet and do exercises 1 and 2

(From English ESL Worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/grammar-topic/adjectives-personality-character/personality-traits/112789):

Personality traits

Exercise 1

Put the personality traits in the appropriate columns.

honest	confide	nt lazy	patient	selfish	shy	organised
mean	brave	stubborn	careful	aggressive	kind	

POSITIVE	NEGATIVE	NEUTRAL

Exercise 2

Match people's descriptions with their traits.

1.	I like to help people.	
2.	I help people even when it's dangerous for me.	
3.	I don't like working, I prefer to relax all day.	
4.	I only think about myself, I don't care about others.	
5.	I always tell the truth and I don't steal or cheat.	
6.	I have a big imagination and I come up with new ideas all the time.	
7.	I often feel nervous talking in front of other people.	
8.	I tidy up my room every day and my clothes are always clean.	
9.	Nobody can change my mind, I don't listen to other people's arguments.	
10	I never buy people expensive presents.	

Lesson 5 Seasons

1. Answer the following questions.

- 1. What season is it now?
- 2. What are the seasons?
- 3. What month is it now?
- 4. Say the month of the year.
- 5. When are the different seasons in your country?
- 6. Say the month of autumn (winter, spring, summer).

2. Read the stories of three people.

AL WHEELER from Canada



We have long, cold winters and short, hot summers. We have a holiday home near a lake, so in summer I go sailing a lot and I play baseball, but in winter I often play ice hockey and go ice-skating. My favourite season is autumn, or



fall, as we say in North America. I love the colours of the trees – red, gold, orange, yellow, and brown.

MANUELA DA SILVA from Portugal



People think it's always warm and sunny in Portugal, but January and February are often cold, wet and grey. I don't like winter. I usually meet friends in restaurants and bars and we chat.



Sometimes we go to a Brazilian bar. I love Brazilian music. But then suddenly it's summer and at weekends we drive to the beach, sunbathe, and go swimming. I love summer.

TOSHI SUZUKI from Japan



I work for Pentax cameras, in the export department. I don't have a lot of free time, but I have one special hobby – taking photographs, of



course! I like taking photographs of flowers, especially

in spring. Sometimes, after work, I relax in a bar near my office with friends. My friend, Shigeru, likes singing pop songs in the bar. This has a special name, "karaoke". I don't sing – I'm too shy!

3. Answer the questions:

- 1) Do they all play sports?
- 2) What do Al and Manuela do in winter?
- 3) Do Manuela and Toshi like going to bars?
- 4) Where is Al's holiday home?
- 5) When does Toshi like taking photographs of flowers?
- 6) What do Manuela and her friends do in summer?
- 7) Do you know all their jobs?
- 8) Why does Al like autumn?
- 9) Why doesn't Toshi sing in the bar?
- 10) Which colours are mentioned in the text?

4. There are six mistakes about Al, Manuela, and Toshi. Correct them.

- 1. Al comes from Canada. In winter he plays ice hockey and goes skiing. He has a holiday home near the sea.
- 2. Manuela comes from Brazil. She likes sunbathing and sailing in summer.
- 3. Toshi comes from Japan. He has a lot of free time. He likes taking photographs and singing pop songs in bars.

5. What do you think?

- 1. What is your favourite season? Why?
- 2. What do you do in the different seasons?

6. Look at the worksheet and do exercises 1 and 2

(From English ESL Worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/reading-comprehension/reading-for-detail-deep-reading/seasons/reading-comprehension-for-beginner-and-elementary-students-3/58975):

Seasons And Weather

ш

1. Describe your favourite season using the words and phrases under the pictures.

2. Describe the weather in all the seasons using words and phrases under the pictures.



Adjectives: cold, icy, frosty, fresh, cloudy, windy, windless, snowy, sunny, clear, lovely, dull, depressive, terrible, slippery, short.

Nouns: temperature, below zero, snowfall, snowstorm, blizzard, snowflake, snowdrift/snowbank, frost, ice, icicle.

Verbs: come, freeze, cover, draw, sparkle, laugh, hide, move, catch, wear, sting.

Phrases: become longer, catch snowflakes, make a snowman, throw snowballs, make a snow wall, ski, skate, go sledging, swim in the snow, decorate the houses and trees for Christmas, make seed- cans and feed birds, wear warm clothes, the frost sting, have winter holidays.



Adjectives: fine, lovely, sunny, dry, warm, cloudy, dull, foggy, rainy, wet, unpleasant, windy, windless, awful.

Nouns: temperature, above zero, the sun, the sky, wind, rain, breeze, shower, raindrop, rainbow, thunderstorm, fog, smog, buds, birds, nest, leaves, flowerbed, humidity.

Verbs: come, return, melt, run, sing, blossom, appear, come out, open, enjoy, watch, sing, make, plant, water, clean, rake, dig, cut, fly. Phrases: snow melts, watch the leaves coming out, make nests, dig the ground, plant seeds, plant flowers, water the flowers, cut dry branches, listen to singing birds.



Adjectives: nice, lovely, warm, hot, sunny, windy, windless, rainy, cloudy, dull, stormy, green, dry, calm, light, strong, pleasant, long. Nouns: the sun, sunrays, wind, breeze, rain, raindrops, shower, thunderstorm, lightning, rainbow, deluge, hail, temperature, fog, smog, tornado, dust storm, sandstorm, hurricane, beach, berries, harvest, mushrooms.

Verbs: come, finish, grow, water, swim, dive, lie, become, enjoy, travel, spend, eat, play, gather, make.

Phrases: become longer, have summer holidays, water flowers, go to the beach, lie in the sun, become sunburnt, enjoy the holidays, gather berries and mushrooms, swim in the river, eat fruit and vegetables, go diving.



Adjectives: gold, beautiful, lovely, warm, cool, sunny, windy, cloudy, rainy, wet, humid, dull, terrible, nasty, cold.

Nouns: rain, rainfall, shower, humidity, wind, windstorm, fog, smog, mist, cloud, dew, precipitation, temperature, harvest, fruit, vegetables, seeds, colours,

Verbs: come, enjoy, be over, gather, cut, dig, fall down, rake, shorten, return, study, fly away, put on, make, chop, clean, become.

Phrases: enjoy the gold autumn, become shorter, watch the leaves of different colours, leaves are falling down, throw the leaves, rake the leaves, chop dry branches, gather seeds, dig the land, the birds fly away, start school, prepare for Halloween, put on warm clothes.

ISLCollective.com

UNIT IV GENERAL ENGLISH Lesson 1 Opposites



1. Match the adjectives with their opposites.

old	horrible
big	old
new	young
lovely	difficult
easy	cheap
hot	cold
expensive	slow
fast	small

2. Make up word-combinations adj+noun, using adjectives from ex.7.

_ man
_ girl
 telephone
device
_ rabbit
 _ turtle
 _ cake
dish
 weather
 winter
shoes
clothes
mouse
elephant

- 3. Make up sentences with word-combinations from exercise 8.
- 4. Read about little Miss Picasso and the new Mozart. Little Miss Picasso



Alexandra Nechita is called "the new Picasso". She paints large pictures in cubist style and sells them for between \$10,000 and \$800.000.

She was born in Romania but now she lives in Los Angeles with her family. She could paint very well when she was only four but her parents couldn't understand her pictures. Alexandra says: "I paint how I feel, sometimes I'm happy and sometimes sad. I can't stop painting." Every day after school she does her homework, plays with her little brother, then paints for two or three hours until bedtime.

Alexandra doesn't spend her money, she saves it: "We were poor when we were first in America. We couldn't buy many things, but now I can buy a big house for my family ad we can travel the world. Last tear we were in London, Paris, and Rome. It was fantastic!"

The New Mozart

Lukas Vondracek is very shy, but every year he travels the world and meets hundreds of people. Lukas is a brilliant pianist and he gives lots of concerts. Last year he was in Washington, Chicago, and London. He is sometimes called "the new Mozart". He says "I'm shy, but I love giving concerts".



Lukas was born in Opava in the Chech Republic but now he lives with his parents in Vienna, where he practises the piano six hours a day. He goes to school two days a week. Lukas could play the piano when he was two and he could read music before he could read books. Now he can write music, too.

Lukas doesn't just play the piano; he plays football and ice hockey. He says: "Mozart was poor and he couldn't play football, so I'm not like him at all!"

5. Answer the questions about Alexandra and Lukas.

- 1. Why is he / she special?
- 2. Where was he / she born?
- 3. Where does he / she live now?
- 4. Who does he / she live with?
- 5. What could he / she do when he / she was very young?
- 6. Does he / she have much free time? Why?
- 7. Is he / she poor?
- 8. Where was he / she last year?
- 9 What is the same about Alexandra and Lukas? What is different?

6. Find a synonym and an antonym in the following lists to match the words in the first column (from English ESL worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/speaking-practice/warmer-filler-cooler/opposites/synonyms-and-antonyms/1927)

Synonyms: needful eager terror sure courteous fasten lovely freedom power steady enquiry old delight hard harm splendid protect give serious

Antonyms: unnecessary good answer easy sadness rude slavery uncertain separate expose uninterested refuse irregular ugly humble modern unimportant bravery weakness

Word	Synonym (Similar meaning)	Antonym (Opposite meaning)
ancient		
beautiful		
certain		
difficult		
energy		
fear		
grand		
happiness		
important		
join		
keen		
liberty		
mischief		
necessary		
offer		
polite		
question		
regular		
shelter		

Lesson 2 Two Famous Firsts

1. Read about George Washington.



George Washington (1732-1799)

He was the first President of the United States. He became President in 1789, eight years after the American War of Independence.

His early life

George was born in Virginia. His family owned a big farm and had slaves. George didn't have much education. During his life he had three jobs: he was a farmer. He grew tobacco and owned horses. He worked

hard but he also liked dancing and going to the theatre. In 1759 he married a widow called Martha Custis. They were happy together, but didn't have any children.

His later life

He was Commander-in-Chief of the army and fought the British in the War of Independence. When the war ended in 1781 he was happy to go back to the farm, but his country wanted him to be President. Finally, in 1789, he became President, and gave his name to the new capital city. He started the building of the White House, but he never lived in it. By 1797 he was tired of politics. He went back to his farm and died there two years later.

2. Complete the questions; ask and answer them with your partner.

- 1. How many jobs did he ...?
- 2. When did he ... President?
- 3. What did he ... doing in his free time?
- 4. Did George and Martha have any ...?
- 5. What ... he build?
- 6. How long ... he President?

3. Read about Margaret Thatcher.



Margaret Thatcher (1925)

She was the first woman prime minister in Europe. She became Prime Minister of Britain in 1979.

Her early life

She was born above a shop in the small English town of Grantham. Her father, Alfred Roberts, was a grocer. He worked very hard for little money. Margaret also worked hard, and she went to Oxford University, where she studied chemistry. In 1951 she married Denis Thatcher, a rich businessman. They had twins, a girl and a boy. The love of her life was politics. She didn't have much time for other interests. She said

she only needed four hour's sleep a night.

Her later life

She became a politician in 1959, leader of the Conservative Party in 1975, and Prime Minister of Britain four years after that. She had a strong personality. A lot of people were afraid of her, and she was called "The Iron Lady". In 1984 Irish terrorists bombed her hotel, but she survived. She was Prime Minister for eleven years. She finally resigned in 1990, but she didn't want to, and she was in tears when she left 10 Downing Street.

4. Complete the questions; ask and answer them with your partner.

- 1. What ... her father's job?
- 2. When did she ... Denis?
- 3. How many children did they ...?
- 4. How much sleep ... she need?
- 5. When did the terrorists ... her hotel?
- 6. How long ... she Prime Minister?

5. Are the sentences true or false?

- 1. He/She came from a rich family.
- 2. He/She loved being a politician.
- 3. He/She worked hard.
- 4. He/She had a lot of other interests.
- 5. He/She had a goof education.
- 6. He/She married, but didn't have any children.
- 7. He/She was in office for eight years.
- 8. Finally he/she was tired of politics and resigned.

6. What do you think?

Who were famous leaders in your country? What did they do?

Lesson 3 The World of Work

1. Read about Ali and Bob.



ALISON HAUSER

Ali is a scientist. She comes from Cambridge in England but now she lives in Switzerland. She works three days a week at the Institute of Molecular Biology in Geneva. She speaks three languages: English, French and German. She's married and has a daughter. She likes skiing in winter and going for walks in summer.



BOB NELSON

Bob is a doctor. He's English but now he lives in Australia in the small town of Alice Springs. He isn't an ordinary doctor, he's a flying doctor. Every day, from 8 a.m. to 10 a.m. he speaks to people on his radio, then he flies to help them. He works 16 hours a day non-stop but he loves his job. He isn't married. He has no free time.

- 2. Practice the questions and answers with your friends.
- 1. Where does Alison Hauser come from?
- 2. Where does she live now?
- 3. What does she do?
- 4. Where does she work?
- 5. Does she speak French?
- 6. Does she speak Spanish?
- 7. What does she like doing in winter and summer?
- 3. Complete the questions and ask your friend to answer them.

1.	Where	Bob _	from?
2.	What	he	?
3.	he	fly to help	people?
4.	he _	Fre	ench and German?
5.	he _	his	job?
6.	he	married?	
7.	he	tim	ne?

4. Read the information about Philippe Ballon, Keiko Wilson and Mark König. Tell your friends about them.



Philippe Ballon		
Job	A barman	
Country	France	
Town	Paris	
Place of work	In the centre of Paris	
Languages	French, a little English	
Married	No	
Family	A dog (!)	
Free time	Walking his dog, playing football	



Keiko Wilson		
Job	An interpreter	
Country	Japan	
Town	New York	
Place of work	At the United Nations	
Languages	Japanese, English, French	
Married	Married to an American	
Family	Two sons	
Free time	skiing	



Mark König	
Job	A journalist for the BBC
Country	England
Гown	Berlin
Place of work	In an office
Languages	German, English, Russian
Married	Yes
Family	Three daughters
Free time	Listening to music

5. Write questions about Keiko (Mark or Philippe).

- 1. Where / come from?
- 2. Where / live?
- 3. What / do?
- 4. Where / work?
- 5. Does / speak English?
- 6. What / in free time?
- 7. How many children ...?
- 8. ... a dog?

6. Check your vocabulary: write the correct job in the box below the picture:

(from British Council: Learning English. Retrieved from:

https://www.google.com/search?q=jobs+worksheets&sca_esv=555442452&sxsrf=AB5st BhC7RVOc3dzwjGxUdDxlyz5zZb7HA%3A1691733713080&ei=0c7VZJa8BNWei-gPi)

receptionist	cleaner	shop assistant	nurse	doctor	engineer
office worker	teacher	hairdres	ser	lawyer	police officer





7. Write the name of a	job to comp	plete the sentences:
------------------------	-------------	----------------------

(from British Council: Learning English. Retrieved from:

https://www.google.com/search?q=jobs+worksheets&sca_esv=555442452&sxsrf=AB5st

BhC7RVOc3dzwjGxUdDxlyz5zZb7HA%3A1691733713080&ei=0c7VZJa8BNWei-gPi_)

1.	A and a work in a hospital or clinic and take care of you when you are ill.
2.	An designs and builds large buildings or bridges.
3.	A keeps an office, school or hotel clean and tidy.
4.	Someone who works in a school classroom and helps students is called a
5.	A person who works in a court and can help people on trial is called a
6.	Someone who cuts and styles your hair to make it look good is called a
7.	Someone who helps you in a shop when you want to buy something is called a
8.	A person who works to stop crime is a
9.	A works at the front desk of a building and welcomes visitors and answers the phone.
10.	An works for a company and usually uses a computer and phone.

Lesson 4 Weekdays and Weekends

	1.	Read	about	Bobbi	Brown's	s weekends.	Complete	the tex	t with	the
erb	S.									

VCI DDI							
Gets up	lives	is	loves	works	doesn't work	interviews	starts
2. Comup new word	-	fou pro Sat bed bed	or and on far ogramm turdays cause she cause it	for weekday nous pe e called and Sund he is excitin	in New Jerse SKY TV in New S, she only work ople for an earthe World ays, she a work at 6.30! g.	W York City. Sks at weeken arly morning This Weeken at 3.00 in the results the second secon	But she ds. She g news nd. On morning her job
love relax go out get u					ome visit (2) g	o shopping	oick up
two sorthem, at 6.00, I them the week. I ofcooking Thursdays I the kid sometimes we	ns, Dylan and I to schoot ten g. Fortur m ds from	n, 7, a ol. On directly y fat school	and Dak to the gy n Mond nner in to y, my hu her. He pol. In to nds. We	ota, 5. Evym. I ays I alw he evenir asband, D o the even	My weekdays are rery morning I home and I I I ays I cookings, but not even on, cooking the next blockings Don and I on Friday	one hou breakfa all the f day because ng. On Tuesd k. Every afte usually	r before ast, then Good for e I don't ays and ernoon I, but
1. V 2. E 3. E 4. V	Where do No you li No you re Why don The in page 1	you ke yo elax a 't you airs.	work? our world weekens a relax a One o	k? - Yes, ends? - N t weeken	tise the question New York. I o, I ds? Bobby Brown	I work.	
1) Where y	ou live						
2) Are mar	ried?						

- 3) Do ... have children?
- 4) What time ... get up / Saturday morning / Monday morning?
- 5) Why ... get up at ...?
- 6) ... like your work?
- 7) Why ... like it?
- 8) ... like cooking?
- 9) ... your husband like cooking?
- 10) Who ... you visit on Tuesday and Thursday?
- 11) Where ... your father live?
- 12) ... go out on Friday evening? Why not?
- 13)... have a busy life?

5. A Questionnaire "How do you live?" Make up dialogues with your friends.

Do you ...?

- 1) get up early on weekdays
- 2) play tennis
- 3) smoke
- 4) drink wine
- 5) like Chinese food
- 6) watch TV a lot
- 7) have a big breakfast
- 8) have a computer

6. Match the vocabulary with the correct definition:

(from British Council: Learning English. Retrieved from: https://learnenglishteens.britishcouncil.org/sites/teens/files/job_adverts - exercises 2.pdf

- 1..... cash
- 2..... a trainee
- 3..... chatty
- 4..... valuable
- 5..... a career
- 6..... skilled

- a. talkative
- having a special ability or training
- an informal word for money
- d. very useful or important
- e. a person who is being trained to do a job
- f. a person's chosen job and life's work



7. Complete the recommendations with a job from the box:

(from British Council: Learning English. Retrieved from: https://learnenglishteens.britishcouncil.org/sites/teens/files/job_adverts - exercises_2.pdf

			_				
	A: Support worker	B: Trainee hairdresser	C: V	Vowee Magazine writer			
	D: Model	E: Cof	E: Coffee Beans café worker				
				Recommended job			
1.	Nina is studying English ar person, and is interested in	nd has her own blog. She is a very soc n music and fashion.	iable				
2.	Dave has just finished scho sociable, likes working with						
3.	Dewei enjoys helping peop people's lives. He is looking will help him in his career.						
4.		e is looking for flexible, part-time work. estaurant or shop. She is tall, beautiful					
5.	-	le. He has experience working in a with more responsibility. He is studyin ble working hours.	g				
	eck your understanding lete the sentences with A, B,	ng: gap fill C, D or E. You can use each letter mo	ore than	once.			
1.	You never have to wear yo	our own clothes for job					
2.	Job offers possibilities for children under 16 years old.						
3.	Your pay for job depends on how successful you are at the job.						
4.	Job requires phy	ysical contact with customers.					
5.	Job offers mana	gement opportunities.					
6.	You might get some 'freebi	ies' if you do job					
7.	You need to work closely v	vith your team for job					
8.	Job is for some	one who likes working with older people	e.				
Discussion							
Do voi	u have a part-time job? Whic	th of these jobs would you most like to	do?				

Lesson 5 Cities of the World

1. Read about New Orleans, Vienna and Liverpool.

New Orleans

In



New Orleans is the largest city in Louisiana, USA. It stands on the banks of the Mississippi River and is a busy port and tourist centre. Its population of about 550,000 is very cosmopolitan, with immigrants from many countries. Every year from all over the world visit New Orleans to see its famous Mardi Gras carnival.

1682 the French named Louisiana after the French King, Louis XIV. They built New Orleans in 1718. In 1762, Louis XV gave it to his cousin Carlos of Spain. Then, in 1800, it became French again until Napoleon sold it to the USA in 1803. The French quarter in New Orleans still has many old buildings and



New Orleans is the home of jazz. Jazz is a mixture of blues, dance songs and hymns. Black musicians started to play jazz in the late 19th century. Louis Armstrong and Jelly Roll Morton came from the city. New Orleans is most famous for its jazz, but it also has a philharmonic orchestra.

excellent restaurants.

Vienna

Vienna, or Wien in German, is the capital of Austria. It stands on the banks of the river Danube and is the gateway between east and west Europe. Its music, theatre, museums, and parks make it a popular tourist centre. It has a population of over 1,500,000.

Vienna has a rich history. Its University opened in 1365, and is one of the oldest in Europe. From 1558 to 1806 it was the centre of the Holy Roman Empire and it became an important cultural centre for

art and learning in the 18th and 19th centuries. The famous psychiatrist, Sigmund Freud, lived and worked there.

Vienna was the music capital of the world for many centuries. Haydn, Mozart, Beethoven, Brahms, Schubert, and Strauss family all came to work here. It is now the home of one of the world's



most famous orchestra, the Vienna Philharmonic. Its State Opera House is also world famous.



Liverpool

Liverpool is Britain's second biggest port, after London. It stands on the banks of the River Mersey in the north-west England. It is an important passenger port for travel to Ireland and many Irish immigrants live there. It has a population of nearly 500,000.

King John named Liverpool in 1207. The city grew bigger in the 18th century, when it became an

important trade centre for sugar, spices, and slaves between Africa, Britain, the Americas, and the West Indies.

Liverpool's most famous musicians are the Beatles. In the 1960' this British rock group was popular all over the world. They had 30 top ten hits. They were all born in Liverpool and started the group there in 1959. They first played at a night club called the Cavern and then travelled the world. One of them,

Paul McCartney, is now the richest musician in the world. Many tourists visit Liverpool to see the homes of the Beatles.

2. Answer the questions about the cities.

- 1. How many people live there?
- 2. What is the name of its river?
- 3. Why is it a tourist centre?
- 4. What are some important dates in its history?
- 5. Which famous people lived there?
- 6. What kind of music is it famous for?
- 7. What is world famous about the city?
- 8. Which of these things can you do in the city you read about?
- go by ship to Ireland
- see Sigmund Freud's house
- see a famous carnival
- walk round the French quarter
- listen to a famous orchestra
- visit the homes of a famous rock group

3. Write some similar information about your city, town, or village. Tell a partner or the class.

4. Look at the picture and do activities:

THE CITY AND THE COUNTRY





WHERE CAN WE SEE THIS THINGS? WRITE THEM UNDER THE RIGHT COLUMN

BARN - ZEBRA CROSSING - TRAFFIC LIGHTS - CROPS - FIELDS - BUILDINGS - SEEDS - SIGNS - BUSES - FENCES-TRACTORS.

COUNTRY

CITY

LOOK AT THE PICTURES AND WRITE THERE IS/ISN'T, THERE ARE/AREN'T

1-....BARNS IN THE COUNTRY.

2-.....BUSES IN THE COUNTRY.

3-......A FARMER IN THE COUNTRY

4-.....TRAFFIC LIGHTS IN THE CITY

5-....FENCES IN THE CITY.

6 -..... A SIGN IN THE COUNTRY.

7-.....CROPS IN THE COUNTRY.

8-.....FIELDS IN THE CITY.

9 -..... A SHOP IN THE CITY.

10-..... A LOT OF CARS IN THE CITY

COMPLETE THE SENTENCES USING:

HAVE TO - DON'T HAVE TO

1-IN THE COUNTRY I......CLEAN THE BARN EVERYDAY

2-IN THE CITY ITHE BUS TO SCHOOL

3-IN THE COUNTRY I.....BE CAREFUL WITH

THE TRAFFIC LIGHTS

4-IN THE COUNTRY IGROW CROPS

5-IN THE CITY I.....FEED THE ANIMALS

6-IN THE CITY ICOLLECT THE EGGS

7-IN THE CITY IDRIVE TRACTORS

8- IN THE COUNTRY I......MILK THE COWS.

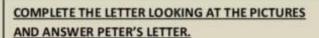
9-IN THE CITY ITHE ROAD AT THE

ZEBRA CROSSING.

TO DO MY HOMEWORK.

10-IN THE CITY AND IN THE COUNTRY I.....

7112



Dear Pam:

How are you? I'm fine and happy because I'm going to

help my father to feed the



milk the



Drives the

And clean the



My father usually



and he grows



We are always very busy.

Now I have to do my homework. Tell me about your life in the city. Love

Peter

UNIT V GRAMMAR Lesson 1 Noun



1. Give the plural of the following nouns.

Language, task, reason, man, invention, field, specialist, decade, standard, article, journal, book, country, computer, organization, tourist, city, word, hand, life, writer.

SINGULAR AND PLURAL NOUNS

Singular

Singular nouns are those nouns that are single in number. A singular noun names one person, place, thing, or idea.

- cat
- apple
- train

- dog
- table
- fan

- wife
- chair
- light

- thiefrock
- cherryloaf
- toothfly

- keycar
- tax
- city
- elf
- tree

ESL Kids World

Plural

Plural nouns are of greater quantity. A plural noun is the name of more than one person, place, thing, or idea.

- cats
- apples
- trains

- dogs
- tables
- fans

- wives
- chairs
- lights

- thieves
- cherries
- teethflies

- rockskeys
- loavestaxes
- elves

- cars
- cities
- trees

2. Choose the right form of the noun from the brackets.

1. Ann's father told the children two funny (story, stories).2. Many (family, families) live in this new house.3. The travelers will see many (country, countries). 4. Put the book on the (table, tables). 5. There are flowers in the (vase, vases). 6. The (child, children) is playing in the yard. 7. There are 20 (student, students) in our group. 8. The cat caught a (mouse, mice). 9. My (friend, friends) are students. 10. We spent the week-end in the (country, countries).

	Rules	Exar	nples	Evanntions
	Vale2	Singular	Plural	Exceptions
	Most nouns ar	Car	Cars	
General rule	s to the and	Bag	Bags	
	-5 to the ent	Table	Tables	
Nouns ending in		Bus	Buses	Fez - Fezzes
's', 'x', 'z', 'ch',	Adding -es	Bench	Benches	Gas - Gasses
′sh′, ′ss′		Вох	Boxes	
		Calf	Calves	Cuff - Cuffs
Nouns ending in 'f' or 'fe'	Changing the o -ves.	Shelf	Shelves	Chef - Chefs
1 01 16		Wolf	Wolves	Belief - Beliefs
	(44)	Radio	Radios	
	Nouns that end in o preceded by a vowe		CI	

3. Use the necessary form of the pronoun.

English Pronouns:					
	Subject Pronoun	Object Pronoun	Possessive Adjectives	Possessive Pronouns	Reflexive Pronouns
1st Person	ı	me	my	mine	myself
2nd Person	you	you	your	yours	yourselfs
3rd Person (male)	he	him	his	his	himself
3rd Person (Female)	she	her	her	hers	herself
3rd Thing	it	it	its	(not used)	itself
1st Person (plural)	we	us	our	ours	ourselfs
2nd Person (Plural)	you	you	your	yours	yourselves
3rd Person& thing (Plural)	they	them	their	theirs	themselves
			or	lymyeng	lish.com

(He) ... 1. composition is very good. 2. (We) ... son goes to school. 3. (You) ... sister is young. 4. (They) ... knowledge of the subject is very poor. 5. (He) ... name is John. 6. (I) ... family lives in Kyiv. (She) friends ... often visit her. 8. (We) ... group is small. 9. (She) ... favorite subject is History. 10.

(They)... classroom is light.

4. Paraphrase the following using the Possessive case:



The pen that belongs to John; the camera that belongs to my friend; the book that belongs to her pupils; the dress that belongs to the girl; the flats that belongs to the workers; the car that belongs to the miners; the coat that belongs to her brother; the watch that belongs to the teacher.

5. Paraphrase the following sentences as in the model.

This is my coat. - This coat is mine.

1. This is our school. 2. This is my note-book. 3. This is your desk. 4. This is his bicycle. 5. This is her bag. 6. This is their classroom. 7. This is our bus. 8. This is her suggestion. 9. These are your tickets. 10. These are our tests.

6. Replace the nouns by the personal pronouns in the Nominative or Objective Case.

1. The girls are playing tennis. 2. I saw the girls in the park. 3. Put the books on the shelf. 4. The books are on the shelf. 5. We saw the film yesterday. 6. The film is very interesting. 7. My sister studies at school. 8. I am waiting for my sister. 9. We listened to the teacher with great interest. 10. The teacher explains a new grammar rule.

7. Fill in the blanks with the forms of the verb to be in Present Indefinite.

1. I... a student. 2. This man ... a farmer. 3. My friend ... in the garden. 4. We ... busy. 5. My father ... not old. 6. The students ... in the classroom. 7. She ... an engineer. 8. I...sorry. I... late. 9. Our teacher ... young. 10. They ... in the park.

8. Translate the following sentences into English.

1. Мій батько — тракторист. 2. Наш учитель зараз у Києві. 3. Твоя сестра вдома? 4. Петро не хворий, він у Києві. 5. Де твій брат? Його немає в кімнаті. 6. Ми в читальному залі. 7. Художник у галереї зараз. 8. Ольга вдома? 9. Його батько зараз дуже стомлений. 10. Хто твоя сестра? Вона лікар.

Lesson 2 Adjective. Numeral

1. Give the comparative and the superlative degree of the following adjectives using the suffixes -er, (the) -est.

Short, cold, early, big, near, late, fast, small, old, nice, young, large, kind, long, quick, easy.

COMPARATIVE AND SUPERLATIVE ADJECTIVES



expen			o.ooo SS ost expensive
	adjective	comparative	superlative
LONG ADJECTIVES	exciting boring popular difficult enjoyable dangerous beautiful interesting comfortable		

	good	better the	best
	adjective	comparative	superlative
IRREGULAR ADJECTIVES	bad little many-much far		-

iSLCollective.com

2. Give the comparative and the superlative degree of the following adjectives and adverbs using the words more, (the) most.

Interesting, carefully, comfortable, progressive, efficient, clearly, beautiful, difficult, beautifully, regularly, prominent, brightly, especially, wonderful, realistic, remarkable, special, dependent, attentively.

3. Use the adjectives and adverbs in the right degree of comparison.

- 1) My brother is much ... than myself (young).
- 2) The opera theatre is one of the ... buildings in the city (beautiful).
- 3) The sound grew ... and ... (faint).
- 4) The party was not so ... as I had expected (gay).
- 5) I have no one ... than you (near).
- 6) What is the ... news (late)?
- 7) Yesterday I came home ... than usual (late).
- 8). Ann sings far ... than Nina (well).
- 9) I like this picture ... of all (well).

4. Read and write the following cardinal numerals:

4. Read and Wille	the following caramar numer
Number	rs in English
Cardinal numbers/C	Ordinal numbers
1/ one/ first	9/ nine/ ninth
2/ two /second	10/ten/ tenth
3/ three/ third	11/ eleven /eleventh
4/ four/ fourth	12/ twelve/ twelfth
5/ five /fifth	13 /thirteen /thirteenth
G/ siv/ sixth	14 Hourteen! fourteenth
6.000	

a) 3; 13; 30;4; 14; 40; 5; 15; 50; 2; 12; 20; 8; 18; 80. b) 21; 82; 74; 69; 96; 74; 53; 22; 87; 58; 22; 35; 41. c) 143; 331; 205; 101; 845; 796; 367; 452; 100;578. d) 1,365; 2,175; 7,312; 9,888; 5,500; 5,050; 2,222;

6,000.

5. Form read and write ordinal numerals from the following:

- a) 5, 7, 9, 3, 1, 10, 11, 8, 4, 6, 15, 13, 2.
- b) 20, 21, 30, 32, 40, 50, 54, 48, 80, 98.
- c) 100, 120, 134, 505, 876, 921, 752, 263.
- d) 1,200; 3,456: 8,935,679; 1,221; 5,000,000.

6. Read the dates:

9.03.1812; 22.06.1941; 1.12.2005; 24.08.1991; 10.05.2010; 5.02.1988; 4.12.1984, 15.11.2011; 31.04.1678.

Lesson 3 Verb. Present Simple

Pr	esent Simple	
Positive	Negative	Interrogative
V, V+-s,-es	do/does not + V	Do/Does not + V ?
I read.	1	
He	We do not	we
She reads.	You > read.	Do you read ?
lt >	They	they
We	He	he
You read.	She does not	Does she read?
They	It ∫ read.	it

1. Use the Present Simple Tense of the verbs in brackets. Translate the sentences into Ukrainian.

My working day (to begin) at seven o'clock. I (to get) up, (to switch) on the radio and (to do) my morning exercises. It (to take) me fifteen minutes. At half past seven we (to have) breakfast. My father and I (to leave) home at eight o'clock. He (to take) a bus to his factory. My mother (to be) a doctor, she (to leave) home at nine o'clock. In the evening we (to gather) in the living room. We (to watch) TV and (to talk).

10 Examples of Present simple Negative sentences

- 1. She does not write poetry in her free time.
- 2. We do not attend church every Sunday.
- 3. The kids do not play in the park after school.
- 4. He does not study for his exams every night.
- 5. I do not practice yoga to relieve stress.
- 6. The clock does not stop ticking away the seconds.
- 7. They do not eat lunch together every day.
- 8. The trees do not provide shade on a hot day.
- 9. We do not listen to music while we exercise.
- 10. She does not take a nap in the afternoon.

LEARNIV.COM

2. Translate the following sentences. Make them interrogative and negative.

- 1. The children drink coffee in the evening.
- 2. Her sister dances very well.
- 3. Our grandmother grows potatoes.
- 4. The pupils remember this rule.
- 5. Nick goes to bed at ten.
- 6. They listen to the radio in the morning.
- 7. You meet him every day.
- 8. It often snows in winter.
- 9. You want to play chess with him.
- 10. His mother teaches geography at school.

3. Ask questions about the time and place of the action.

- 1. They plant trees in autumn.
- 2. Peter comes to the University at eight.
- 3. They discuss films after classes.
- 4. We listen to the news at ten o'clock.
- 5. The teacher corrects our dictations in the evening.
- 6. Her brother studies in Lviv.
- 7. Many birds fly to the south in autumn.
- 8. They spend their holidays in the country.
- 9. My parents live in a village.
- 10. His group-mates go to the theatre in the evening.

4. Put questions to the italicized words.

- 1. The children go to bed at ten o'clock.
- 2. His son knows English well.
- 3. My father reads *newspapers* in the evening.
- 4. Her aunt lives in *Lutsk*.
- 5. Our parents grow wheat.
- 6. This man works at a machine-building plant.
- 7. It snows in winter.
- 8. We buy *bread* at this shop.
- 9. My sister learns many poems by heart.
- 10. Ann helps her mother about the house.

5. Translate into English.

- 1. Де ти живеш? Я живу в Києві.
- 2. Коли в тебе канікули? У січні.
- 3. Що тобі найбільше подобається в університеті?
- 4. Мій брат працює в лікарні. Він лікар. Він встає в двадцять хвилин на восьму. Він працює вранці і вдень. Увечері він не працює. Увечері він

відпочива ϵ .

- 5. Твоя сестра говорить французькою мовою? Ні. Вона говорить німецькою мовою, а її чоловік говорить англійською мовою.
 - 6. Коли ви встаєте? Я встаю за чверть сьома.
- 7. Коли встає твій брат? Він встає за двадцять восьма. А твоя сестра також встає за двадцять восьма? Ні. Вона встає о дев'ятій годині.
 - 8. Я вивчаю англійську мову. Мій друг також вивчає англійську мову.
 - 9. Де ти живеш? Де живе твій товариш?
 - 10. Де працюють твої батьки?

PAST SIMPLE TENSE



1. Form Past Simple of the following regular verbs:

to look, to seem, to dress, to love, to cry, to jump, to profit, to enjoy, to hurry, to clear, to ask, to translate, to rob, to carry, to cook, to shout, to answer, to play.

2. Give the three forms of the following irregular verbs:

to know, to go, to learn, to leave, to make, to mean, to meet, to say, to teach, to tell, to understand, to write, to give, to take, to read, to begin, to buy, to come, to grow, to eat, to drink, to have, to see, to speak, to break, to win, to sleep, to stand.



3. Make the following interrogative and negative.

- 1. The teacher repeated the question.
- 2. His wife planned her work well.
- 3. Their children cleaned the garden and then they played basketball.
- 4. The girl answered the question at once.
- 5. They slept in the open air.
- 6. The clock struck ten.
- 7. The little girl cried a little and then smiled.
- 8. She cooked a good dinner.
- 9. They waited for a bus.
- 10. The bus arrived at five.

4. Change the following into the Past Simple Tense.

- 1. The girl learns English.
- 2. My friend gets up early.
- 3. The worker comes home at six.
- 4. The old women talk about the weather.
- 5. Nick goes to bed at ten.
- 6. You meet him every often in summer.
- 7. His mother comes home late.
- 8. The meeting lasts about two hours.
- 9. They live in France.
- 10. They travel there by train.

5. Put questions to the italicized words:

- 1. They sat in the first row.
- 2. The performance lasted for two hours.
- 3. He went to Kyiv to see some friends.
- 4. She put the mail on my desk.
- 5. He walked to the university with Mary.
- 6. They spoke to us in French.
- 7. He arrived home *very late*.
- 8. I found my English book *yesterday*.

6. Translate into English.

- 1. Діти допомагали батькам.
- 2. Батько прийшов додому пізно.
- 3. Що ви робили в неділю?
- 4. Де ти був учора ввечері? Я ходив у кіно. Тобі сподобався фільм? Так, фільм мені дуже сподобався.
- 5. Що ви робили на уроці англійської мови? Ми читали новий текст, відповідали на запитання і перекладали речення з української мови на

англійську.

6. Коли ви почали вивчати англійську мову? — Ми почали вивчати англійську мову три роки тому.

7. Open the brackets using the verbs in Present Simple or Past Simple.

- 1. Tom always (to eat) breakfast.
- 2. Yesterday he (not to eat) breakfast because he (to get) up late.
- 3. We (to like) to cook but we (not to like) to wash dishes.
- 4. He never (to shout) at his students. He (to be) a wonderful teacher, I remember.
 - 5. My friend (to know) Spanish very well.
 - 6. Who (to ring) you up an hour ago?
 - 7. He (to live) on the third floor.
 - 8. It (to take) you long to find his house yesterday?

Lesson 5 Future Simple



1. Change the following into the Future Simple Tense.

- 1. I go for a walk after supper.
- 2. Everybody laughs at this picture.
- 3. Helen gives private lessons.
- 4. He spends his summer holidays in the country.
- 5. She agrees with him.
- 6. I saw him at the concert.
- 7. Our school year begins on the 1st of September.
- 8. We do our homework in the afternoon.

2. Make the following interrogative and negative.

- 1. Bob will graduate from the university next year.
- 2. There will be a dance at the end of the party.
- 3. I shall do what you want.
- 4. Harris will sing a comic song.
- 5. They will announce this news later today.
- 6. We shall take Jane for a picnic.
- 7. They will have a meeting tonight.
- 8. There will be many visitors today.

3. Put questions to the italicized words.

- 1. Some of them will go to Brighton one of these days.
- 2. Next Sunday I shall write *a letter* to my friend.
- 3. Soon there will be many young trees *in the park*.
- 4. *Our friends* will come to see us today.

- 5. Jack won't go to the cinema because he is busy.
- 6. We'll play chess tonight.
- 7. We'll get up at seven tomorrow.
- 8. The plant will make agricultural machines.

FUTURE TIME CLAUSES

We can use sentences with after, as soon as, before, until & when to talk about the future

	Clause or Condition	Result or Main Clause
After As soon as Before Until When	Present Simple	WILL + Infinitive CAN/MAY + Infinitive IMPERATIVE
After As soon as Before Until When	you get to work, I get home, I leave, you tell me, I grow up,	give me a call. I'll cook dinner. I may mail you. I won't do anything. I'll be an astronaut.

Although they are called Future Time Clauses, the verb is normally in the **present**.

4. Replace the infinitives in brackets by the Future Simple or the Present Simple Tense.

- 1. If you (to come) at five o'clock, we (to see) an interesting program on TV
- 2. Before you (to leave) home, ring me up.
- 3. As soon as you (to get) my letter, let me know.
- 4. When I (to enter) the University, I (to study) two foreign languages.
- 5. If you (to be) busy on Sunday afternoon, we (not to go) to the stadium.
- 6. If you (to look through) today's paper, you (to find) an interesting article.
- 7. When she (to arrive) at the hotel, it (to be) 5 o'clock.
- 8. When you (to be tired), we (to stop) working.

aprendeinglesenleganes.com

Future in time clauses

WHEN, IF, BY THE TIME, BEFORE, AFTER, AS SOON AS, WHILE, ONCE, UNTIL, etc.

We do not use the future tense (will) in a time clause to refer to future time.

Examples:



✓ As soon as I get there , I will call you.



 \times As soon as I will get there, I will call you.



He wants to retire when he is 60 years old.



X He wants to retire when he will be 60 years old.



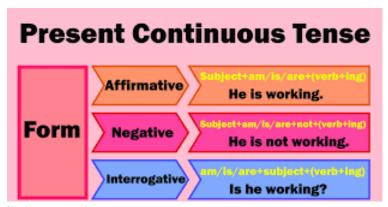
▼ The party will be over by the time I get home.

X The party will be over by the time I will get home.

5. Complete the following sentences.

- 1. I will have lunch as soon as ...
- 2. He will post the letter as soon as ...
- 3. We will go to the country if the weather ...
- 4. I'll listen to the radio before I ...
- 5. She will not call you up until you ...
- 6. They will go to the cinema or a concert after they ...
- 7. I'll make you a sign, when I ...
- 8. Wait here until the doctor ...

UNIT VI GRAMMAR Lesson 1 Present Continuous



1. Make the following sentences interrogative and negative.

- 1. You are doing that exercise correctly.
- 2. He is looking for the book which he lost.
 - 3. All the birds are

flying south.

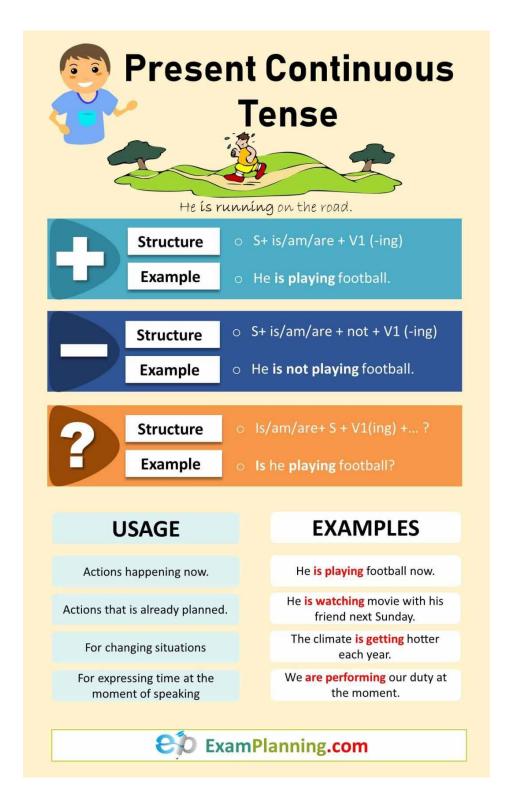
- 4. The sky is getting very dark.
- 5. They are laughing at what you said.
- 6. They are travelling in Europe at present.
- 7. Helen is taking dancing lessons at the country club.
- 8. Mr. Evans is writing a series of articles on the economic situation.

2. Put questions to the italicized words.

- 1. The children are planting *trees*.
- 2. They are working in the garden.
- 3. The girl is trying on *a dress*.
- 4. *Nick* is talking with his friends.
- 5. The students *are reading*.
- 6. The man is sitting in the armchair.
- 7. The girl is drawing.
- 8. The woman is wearing a blue dress.

3. Use the verbs in brackets in the Present Continuous Tense.

- 1. Look! It (begin) to rain.
- 2. They (wait) for us on the corner now.
- 3. I see that you (wear) your new suit today.
- 4. Listen! Someone (knock) at the door.
- 5. Please! Be quiet! The baby (sleep).
- 6. The leaves (fall) from the trees.
- 7. John (have) lunch in the cafeteria now.
- 8. Listen! I think the telephone (ring).



4. Replace the infinitive in brackets by the Present Simple or the Present Continuous Tense.

- 1. We (to gather) mushrooms in summer.
- 2. The children are in the forest now. They (to gather) mushrooms.
- 3. Where is Kate? She (to do) her homework. She always (to do) her homework in the evening.

- 4. The pupils (to write) compositions once a month.
- 5. Don't shout. The pupils of the ninth form (to write) compositions.
- 6. Water (to boil) at 100°.
- 7. Turn off the gas. The milk (to boil).
- 8. Mary (to dance) all modern dances very well.

5. Complete the sentences:

1. I am going back to my room. (go)
2. We passed many months at this place: nothing, however, occurred requiring any particular notice, relating to myself, beyond what I have already stated, and I <u>am not writing</u> the history of others. (not/write)
3. What are you driving at, man? (what/you/drive/?)
4. I hope James is getting his verse as usual, and that Mary her little hymn. (not/forget)
5. I don't know what you about! (talk)
6. I to her sea-going qualities. (not/allude)
7. The man you for. (wait)
8. A rare opportunity before this nation. (pass)

6. Write the correct form of the verb:

	John	(read) a book now.
2.	(1.68) (2.57 d.m.)	(you do) tonight?
		(work) late today.
		(not listen) to music.
		(sit) next to Paul.
6.	How many other	students(you study) with?
7.	The phone	(not ring).
3.	The train to Glas	gow(leave) from platform 8.
		(begin) to understand the Present Continuous no
		(work) tonight.
11.	Listen! The telep	hone(ring).
2	Ms. Johnson	(see) a customer at 3 o'clock.
3	My Dad	(not have) his lunch now.
		(not study) tomorrow.
		(not rain) today.
		s to use Present Continuous:
1.	The cat eats	in the kitchen.
2.1	Peter sits	in the kitchen.
3.	Peter sits The children bake	in the kitchenin his tree housebiscuits.
3.° 4.1	Peter sits The children bake walk	in the kitchenin his tree housebiscuits.
2.1 3.1 4.1 5.1	Peter sits The children bake walk We paint	in the kitchenin his tree housebiscuitsto the mall on my own
2.1 3.1 4.1 5.1	Peter sits The children bake walk We paint Nina plays	in the kitchenin his tree housebiscuitsto the mall on my ownour house cream and brown.
2.1 3.1 4.1 5.1 6.1 7.1	Peter sits The children bake walk We paint Nina plays	in the kitchenin his tree housebiscuitsto the mall on my ownour house cream and brownthe piano quite well.
2.1 3.1 4.1 5.1 6.1 7.1	Peter sits The children bake walk We paint Nina plays The boys ride an leaves	in the kitchenin his tree housebiscuitsto the mall on my ownour house cream and brownthe piano quite welltheir bicycles often.

Lesson 2 Past Continuous. Future Continuous

PAST CONTINUOUS TENSE

0

S + was/were + V-ing

She was cooking all morning.

S + was/were + not + V-ing

She was not sleeping when he came home.

?

Was/were + S + V-ing?

Was she sleeping when he came home?

- 1. Change the following into the Past Continuous Tense.
- 1. The man is standing near the door.
- 2. Tom told a story.
- 3. The children swam in the river.
- 4. Is Mary wearing a white dress?
- 5. She went to the cinema.
- 6. They didn't work in the garden.
- 7. We are not sitting by the window.
- 8. The workers built a bridge.

Past Continuous Tense

As the name suggests, Past continuous tense describes an action which shows continuation, an action that happened in the past and continued to happen over a period of time. For example, The dog was barking at the moon.

To make an affirmative, we use the following formula, Subject + was/were + present participle + object

To make a negative sentence, we use the following formula, Subject + was/were not + present participle + object

In order to ask questions, we use the following formula,

Wh- + Were/was + subject + present participle + object

www.worthytutors.com

2. Use the verbs in brackets in the Past Continuous Tense.

- 1. They (eat) dinner when we came.
- 2. It (rain) when I left home.
- 3. When you telephoned, I (have) dinner.
- 4. The baby (sleep) soundly when I went to wake him.
- 5. She (talk) with Mr. Smith when I saw her in the hall.
- 6. The accident happened while they (travel) in the South.
- 7. When I got up this morning, the sun (shine) brightly.
- 8. At seven o'clock, when you rang me up, I (read) the newspaper.

3. Put questions to the italicized words.

- 1. The man was reading a magazine when somebody knocked at the door.
- 2. He was waiting for a bus.
- 3. My brother was skating.
- 4. The students were dancing when I opened the door.
- 5. The girl was eating *ice-cream* when we came in.
- 6. She was looking *after her little brother*.
- 7. The pupils were discussing *a story*.
- 8. The man was passing the theatre when the clock struck ten.
- 9. It was snowing when we went out.
- 10. The boy was running very fast.

Simple Past vs. Past Progressive

Simple Past

- Completed action at specified time in past
- Ordered events with "before" and "after"
- Cause-effect with "when" or "after"
- Used for narrative
- Interrupts a continuous action (in progressive)

Past Progressive

- Action in progress over a period of time
- In progress at an exact moment in the past
- Two simultaneous actions
- Continuous action can be interrupted (action in past)

4. Use the verbs in brackets in the Past Continuous or the Past Simple Tense.

- 1. I (to go) to the cinema yesterday.
- 2. I (to go) to the cinema at four o'clock yesterday.
- 3. My brother (not to play) tennis yesterday. He (to play) tennis the day before yesterday.
- 4. My sister (not to play) the piano at four o'clock yesterday. She (to play) the piano the whole evening.
- 5. When I came into the kitchen, mother (to cook).
- 6. She (to cook) fish yesterday.
- 7. You (to do) your homework yesterday?
- 8. You (to do) your homework from eight till ten yesterday?



5. Use the verbs in brackets in the Future Continuous Tense.

- 1. At ten o'clock tomorrow morning she (have) her music lesson.
- 2. I (wait) on the corner for you at the usual time tomorrow morning.
- 3. It probably (rain) when you get back.
- 4. If you come before six, I (work) in my garden.
- 5. At this time tomorrow afternoon I (take) my final English exam.
- 6. If we go there now, they (have) dinner. But if we go later, they (watch) television.
- 7. At this time next year he (study) at the University.
- 8. Don't come to see him tonight, he (to pack) things.

6. Translate into English.

- 1. Ми бачили її вчора. Вона працювала в саду.
- 2. Коли годинник пробив дванадцять, ми всі сиділи за столом.
- 3. Де ти був о третій годині? Я дзвонив тобі, але ніхто не відповів. Я ремонтував велосипед.
- 4. Коли я зайшов до залу, Ольга грала на скрипці.
- 5. Що вона робила, коли ви прийшли до неї? Вона прибирала в кімнаті.
- 6. Коли я вийшов з дому, ішов сильний дощ.
- 7. Що робив учитель, поки ви писали твір?
- 8. Що робив ваш син о десятій годині вечора? Читав якусь книжку.

Lesson 3 Present Perfect

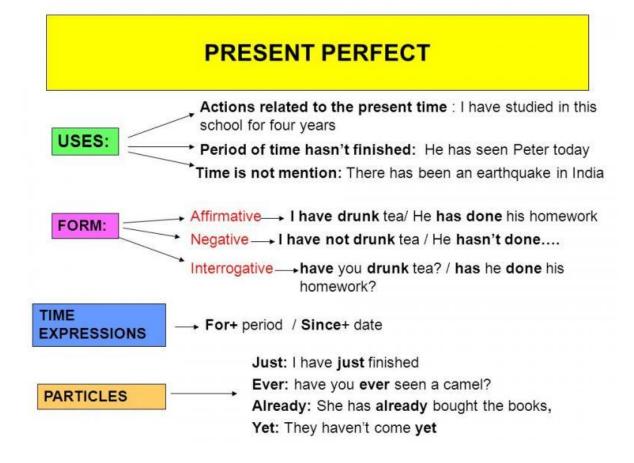


1. Read and translate the following sentences into Ukrainian.

- 1) What's the time? Sorry, I have left my watch at home.
- 2) I can't get into the room. I have lost the key.
- 3) It is absolutely dark in the room. Who has turned off the light?
- 4) Where are the students? They have just left for the library.
- 5) My sister has always helped me with my English.
- 5) You have never heard about it, have you?
- 6) He hasn't written to her yet.
- 7) Have you ever seen this film?
- 8) I have often been to the Museum of Art. Have you?

2. Open the brackets using the verbs in Present Perfect.

- 1. I (to speak) to him about it several times.
- 2. We (to learn) many new words in this course.
- 3. He (to make) the same mistake several times.
- 4. I (to hear) that story before.
- 5. I am afraid that I (to lose) my car keys.
- 6. She (to see) the film several times.
- 7. I (to tell) John what you said.
- 8. She (to return) my book at last.



3. A. Make the following interrogative.

- 1. You have taken my note-book.
- 2. His sister has past her examinations.
- 3. Her brother has entered the University.
- 4. The children have already had breakfast.
- 5. The teacher has just come.

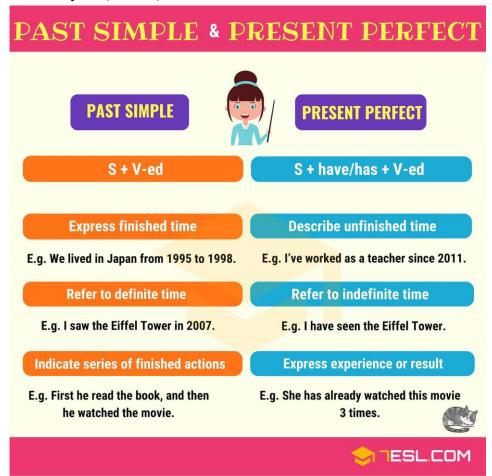
B. Make the following negative.

- 1. Our professor has come from London (yet)
- 2. I have written a letter to Ann.
- 3. They have opened the shop.
- 4. My friend has changed since I saw him last.
- 5. He has told the director about it.

4. Open the brackets using the verbs in Present Continuous or Present Perfect Tense.

- 1. What's the matter? Why he (to stop)?
- 2. My cousin (to look) for a job, but he (not to find) job yet.
- 3. It (to be) impossible for her to feel at home here.
- 4. What you (to study) now?

- 5. Sophie is busy. She (to knit) a sweater for her grandson.
- 6. People (to plant) carrots and tomatoes now.
- 7. What you (to look) for?
- 8. What you (to talk) about?



5. Open the brackets using the verbs in Present Perfect or Past Indefinite Tense.

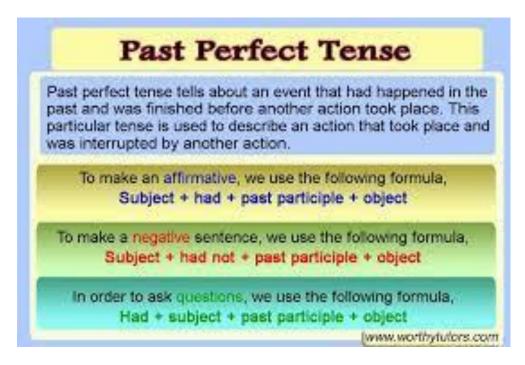
- 1. I (not yet to eat) today.
- 2. He (not to eat) yesterday.
- 3. You (to play) the piano yesterday?
- 4. You (to play) the piano today?
- 5. What you (to prepare) for today?
- 6. Look at this birdhouse. Mike (to make) it himself.
- 7. When you (to see) Mary?—I (to see) her last week.
- 8. At last I (to translate) the article: now I shall have a little rest.

6. Translate into English.

- 1. Я залишив свій зошит вдома.
- 2. Де Петро? Він ще не прийшов.
- 3. Що ти робиш? Читаю англійське оповідання. Скільки сторінок ти вже прочитав? Я прочитав уже сім сторінок.

- 4. Скільки нових слів ви вивчили в цьому місяці?
- 5. Я не можу їхати з тобою. Я ще не склав екзамену з геометрії.
- 6. Ми щойно прочитали телеграму.
- 7. Ми одержали телеграму вчора.
- 8. Я знаю цього лікаря з 2010 року.

Lesson 4 Past Perfect

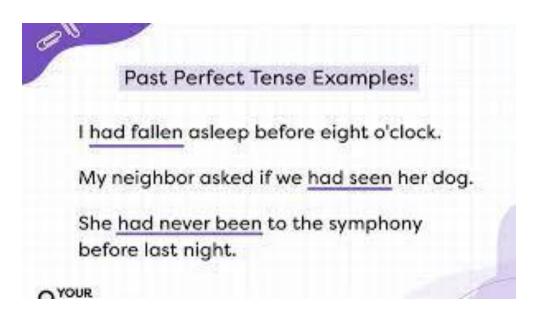


1. Use the Past Perfect Tense of the verbs in brackets.

- 1. I was sure that I (see) the man before.
- 2. I asked him why he (leave) the party so early.
- 3. It was clear that he (give) us the wrong address.
- 4. The teacher corrected the exercises which I (prepared).
- 5. He knew that he (make) a serious mistake.
- 6. She said she (look) everywhere for the book.
- 7. I felt that I (meet) the man somewhere before.
- 8. He wanted to know what (happen) to his briefcase.

2. Change the following into the Past Perfect Tense. Use the words in brackets to indicate the time of actions.

- 1. The delegation has arrived (by last Sunday).
- 2. The students have read this book (by last week).
- 3. Ann has done her lessons (by the time I came).
- 4. They have finished this work (by 5 o'clock yesterday).
- 5. We haven't yet seen our teacher (before the bell rang).
- 6. Have you seen the telegram (before I called you up)?
- 7. He has translated the article (by this time yesterday).
- 8. I have already had dinner (when my friend came).



3. Make the following interrogative and negative. Give short answers.

- 1. You had studied English before you entered the university.
- 2. They had arrived at the station by 6 o'clock.
- 3. James had finished reading the book by last Sunday.
- 4. Eve had done her lessons by the time you rang her up.
- 5. The teacher had given her students their homework before the bell rang.
- 6. The lecture had begun by the time I entered the hall.
- 7. The children had fallen asleep by the time we returned.
- 8. They had finished the construction of the stadium by the time we moved there.

4. Replace the infinitives in brackets by the Past Indefinite or the Past Perfect Tense.

- 1. By two o'clock the teacher (to examine) all the students.
- 2. On my way to school I (to remember) that I (to leave) my report at home.
- 3. All my friends (to be) glad to hear that I (to pass) all the examinations successfully.
- 4. Where you (to work) before you (to enter) the university?
- 5. He (to study) French before he entered the institute.
- 6. All the passengers (to see) at once that the old man (to travel) a great deal in his life.
- 7. By the time we (to come) to see him, he (to return) home.
- 8. During the holidays my friend (to visit) the village where he (to live) in his childhood.

Lesson 5 Active Voice

1. Make the sentences negative and interrogative:

- 1. A university is an institution for advanced teaching, conferring degrees and engaging in academic research.
- 2. A university provides scientific degree in different subjects.
- 3. Many higher schools publish their own research journals.
- 4. A university offers courses in various disciplines.
- 5. Faculties are departments or groups of related departments.

2. Put questions to the italicized words:

- 1. This university model involves *strict discipline and control* over every aspect of the university.
- 2. A national university functions as *a completely independent body* inside of the same state.
- 3. Most universities offer courses in subjects ranging from *the* natural sciences, engineering, architecture *or* medicine, *to* sports sciences, social sciences, law *or* humanities.
- 4. In a number of countries, *major classic universities* usually have their own botanical gardens, astronomical observatories, business incubators and university hospitals.
- 5. In some countries most students attend university in their local town.

3. Translate the sentences into English:



- 1. Оксфордский университет ϵ найкращим університетом Об'єднаного Королівства та одним з ведучих закладів вищої освіти у Європі.
- 2. Студенти отримують наукові ступені бакалавра та магістра.
- 3. Академічний рік триває протягом трьох семестрів та закінчується екзаменами.
- 4. Успішні студенти отримують стипендію.
- 5. Центральна науково-дослідна бібліотека Оксфордського університету це друга найбільша бібліотека Об'єднаного Королівства після Британської бібліотеки.

4. Translate the sentences into English:



- 1. Університет Кембриджу став другим найстарішим університетом Об'єднаного Королівства.
- 2. Один із найвідоміших математиків світу Ісаак Ньютон провів більшу частину свого життя в цьому університеті.
- 3. Веслувальний Клуб Кембриджського університету було засновано в 1828 році.
- 4. Єдиною метою клубу була перемога над веслувальним клубом Оксфордського університету.
- 5. До другої світової війни тенісна команда університету отримала 28 перемог в Уімблдонському чемпіонаті.

5. Replace the infinitives in brackets by the Past Indefinite, Past Continuous or Past Perfect Tense.

Last night we (to go) to a football match. We (to take) a bus. The bus (to be) full of people as many people (to want) to see the match. We (to get) off the bus and (to go) in the direction of the stadium. While we (to cross) the road, I (to see) Victor. He (to stand) at the corner. He said he (to wait) for his friend who (to come) to Kyiv the day before and (to wish) to see the new stadium. We (to enter) the stadium just as the football players (to come) out on the field. At the entrance to the stadium we (to meet) Oleg. He (to show) us to our seats and we (to agree) to meet in the snack bar during the interval. He (to ask) me if I (to play) football in my childhood.

6. Use the verbs in brackets in Future Perfect.

- 1. I am sure they (complete) the road by June.
- 2. He says that before he leaves he (see) every show in the town.
- 3. By the time you arrive, I (finish) reading your book.
- 4. I (be) in this country for two years by next January.
- 5. A year from now he (take) his medical examination and will begin to practice.
- 6. If you don't make a note of that appointment, you (forget) it by next week.
- 7. By the end of the week we (translate) this book already.
- 8. By the time he leaves home, we (come) to the station.

ГРАМАТИЧНИЙ ДОВІДНИК

§1. Однина і множина іменників

Обчислювальні іменники можуть мати форму однини і множини.

1. Як правило, множина іменників в англійській мові утворюється за допомогою додавання закінчення —**s**:

a book – some books книга – декілька книг photo – photos фотографія – фотографії

ball – balls м'яч – м'ячі

one kilo – ten kilos один кілограм – десять кілограм

shop – shops магазин – магазини 2. Після –s, -ss, -sh, -ch, -x – додається **–es:**

bus – buses автобус – автобуси glass – glasses стакан – стакани dish – dishes страва – страви

watch – watches годинник – годинники

dress – dressesсукня – сукніbench – benchesлавка – лавкиbox – boxesкоробка – коробки

3. Якщо іменник закінчується на приголосну + y, тоді у змінюється на i + es:

faculty – faculties факультет – факультети

city – cities місто – міста

lorry – lorries вантажівка - вантажівки

family – families cim' s - cim' i Після голосної – y не змінюється: day - days день – дні

boy – boys хлопець - хлопці journey – journeys подорож – подорожі

4. Якщо іменник закінчується на -f та -fe, в множині маємо -ves:

leaf – leavesлисток - листкиshelf – shelvesполичка - поличкиthief – thievesзлодій – злодії

4. До декількох іменників, які закінчуються на **-0** у множині додається **- es**:

potato – potatoes картоплина – картоплини

tomato – tomatoes помідор – помідори

hero – heroes герой – герої

До більшості іменників, які закінчуються на -о, у множині додається

-S:

photo – photos фотографія – фотографії

zoo – zoos зоопарк – зоопарки

5. Деякі іменники утворюють форму множини не за правилами:

man – men чоловік – чоловіки

woman – women жінка – жінки child – children дитина – діти

foot – feet нога – ноги (стопа – стопи)

tooth – teethзуб – зубиmouse – miceмиша – мишіsheep – sheepвівця – вівціfish – fishриба – рибиperson – peopleлюдина – люди

e.g. I have three days to prepare for the competitions.

He has some **information** for the **coaches** of the **teams**.

Money is always useful.

Can you buy two bottles of milk?

Track-and-field athletics includes many different events.

§2. Ступені порівняння прикметників

1. В англійській мові *односкладові* прикметники утворюють вищий та найвищий ступінь порівняння за допомогою суфіксів **-er**, **-est**:

cheap — cheaper — the cheapest дешевий — дешевший - найдешевший small — smaller — the smallest (малий)

big – bigger – the biggest (великий)

nice – nicer – the nicest (гарний)

2. *Двоскладові* прикметники, які закінчуються на приголосну + у, теж утворюють ступені порівнянн за допомогою цих суфіксів:

happy – happier – the happiest (щасливий)

lucky – luckier – the luckiest (удачливий)

lovely – lovelier – the loveliest (приємний)

pretty – prettier – the prettiest (симпатичний)

heavy (важкий), dirty (брудний), tidy (охайний), easy (легкий), silly (нерозумний), funny (смішний).

3. Деякі двоскладові прикметники можуть утворювати ступені порівняння і за допомогою суфіксів, і за допомогою слів **more, the most**:

Narrow – narrower / more narrow – the narrowest / the most narrow (вузький)

Common (загальний), pleasant (приємний), quiet (тихий), polite (ввічливий), clever (розумний), simple (простий), gentle (лагідний), cruel (жорстокий), tired (втомлений), stupid (нерозумний).

4. Деякі *двоскладові* прикметники утворюють ступені порівняння за допомогою слів **more, the most**:

Useful – more useful – the most useful (корисний)

Helpful (корисний), careful (обережний), hopeless (безнадійний), boring (нудний), willing (готовий), annoyed (надоїдливий), surprised (здивований), correct (правильний), exact (точний), certain (певний), normal (звичайний), frequent (частий), recent (недавній), famous (відомий), modern (сучасний), afraid (зляканий), eager (нетерплячий), foolish (глупий).

5. *Трискладові та багатоскладові* прикметники утворюють ступені порівняння за допомогою слів **more, the most**:

```
exciting – more exciting – the most exciting (захоплюючий) interesting – more interesting – the most interesting (цікавий) elegant – more elegant – the most elegant (елегантний) reliable – more reliable – the most reliable (надійний)
```

6. Деякі прикметники утворюють ступені порівняння не за правилами:

```
Good – better – the best(хороший)Bad – worse – the worst(поганий)Far – farther / further – the farthest / furthest(далекий)
```

7. Ми використовуємо more, the most та їх антоніми less, the least, щоб порівняти кількості:

```
Many / much – more – the most
Little – less - the least
```

e.g. The room is the warmest.

This dress is more elegant.

These results of the experiment are the most reliable.

It is his **best** record in jumping.

I am very busy these days, I have less free time than I used to.

§3. The Present Indefinite (Present Simple) Tense

Часи групи Indefinite вживаються для вираження дії як факт, регулярної повторюваної дії стосовно теперішнього, минулого чи майбутнього часу.

- 1. Дієслова у формі Present Indefinite показують дію як факт, регулярну повторювану дію в теперішньому часі. Ця форма утворюється від форми інфінітиву без частки to:
 - e.g.: I **train** every day. Я тренуюся щодня.

They **play** football every evening. – Вони грають у футбол щовечора.

2. Заперечна та питальна форма утворюються за допомогою допоміжного лієслова do:

e.g.: **Do** I **train** every day? – Yes, I do.

No, I do not (don't).

I don't train every day.

Do they **play** football every evening? – Yes, they do.

No, they don't.

They don't play football every evening.

3. Якщо підмет виражений 3 особою однини, до дієслова додається закінчення -s. Це ж закінчення переходить до допоміжного дієслова в питальній та заперечній формах:

e.g.: He runs in the park every morning.

Does he **run** in the park every morning? – Yes, he does.

No, he does not (doesn't).

He doesn't run in the park every morning.

4. Дієслово to be – бути має такі форми в Present Indefinite:

(I) am

(you, we, they) are

(he, she, it) is

e.g.: He **is** a record-holder. – Він рекордсмен.

They **are** students of the Physical Training Faculty. – *Вони студенти* факультету фізичної культури.

I am a coach of the University team.

Питальна та заперечна форма утворюються без допоміжного лієслова:

Is he a record-holder? – Yes, he is.

No, he isn't. He is not a record-holder.

Are they students of the Physical Training Faculty? – Yes, they are.

No, they are not.

They are not students of the Physical Training Faculty.

§4. The Past Indefinite (Past Simple) Tense

1. Дієслова у формі Past Indefinite показують дію як факт, повторювану дію в минулому часі. Ця форма утворюється шляхом додавання закінчення —ed до форми інфінітиву без частки to для правильних дієслів; для неправильних дієслів — друга форма (таблиці неправильних дієслів):

e.g.: to train – **trained**

to play – **played**

to run – ran

to swim - swam

I **trained** yesterday. – Я тренувався вчора.

They **played** football last week. – Вони грали у футбол минулого тижня.

2. Заперечна та питальна форма утворюються за допомогою допоміжного дієслова *did*:

e.g.: **Did** I **train** yesterday? – Yes, I did.

No, I did not (didn't).

I didn't train yesterday.

Did they **play** football last week? – Yes, they did.

No, they didn't.

They didn't play football last week.

3. Дієслово *to be* – *бути* має такі форми в Past Indefinite:

to be - was, were - been

e.g.: He **was** a record-holder five years ago. *Biн був рекордсменом п'ять років тому*.

They were students of the Physical Training Faculty last year. – Вони були студентами факультету фізичної культури минулого року.

Питальна та заперечна форма утворюються без допоміжного дієслова:

Was he a record-holder five years ago? – Yes, he was.

No, he wasn't.

He was not a record-holder five years ago.

§5. The Future Indefinite (Future Simple) Tense

1. Дієслова у формі Future Indefinite показують дію, яка відбудеться в майбутньому. Ця форма утворюється за допомогою допоміжних дієслів *shall* (для першої особи однини та множини) та will (для інших осіб) та форми інфінітиву змістового дієслова без частки to:

e.g.: I **shall train** tomorrow. – Я тренуватимусь завтра.

They **will play** football next week. — *Вони гратимуть у футбол наступного тижня*.

- 2. Заперечна та питальна форма утворюються за допомогою допоміжних лієслів:
 - e.g.: **Shall** I **train** tomorrow? Yes, I shall.

No, I shall not (shan't).

I shan't train tomorrow.

Will they play football next week? – Yes, they will.

No, they will not (won't).

They won't play football next week.

3. Заміна майбутнього часу на теперішній в підрядних реченнях часу і умови:

В англійській мові існує правило стосовно складнопідрядних речень з підрядними часу і умови – в таких підрядних майбутній час замінюється на теперішній.

e.g.:

- 1. They **will go** to London, if they <u>win</u> the first place at the championship. Вони поїдуть до Лондону, якщо виграють перше місце на чемпіонаті.
- 2. They **will finish** their warm up when the coach <u>comes</u> to the stadium. *Вони закінчать розминку, коли тренер прийде на стадіон.*

§6. The Present Continuous Tense

Часи групи Continuuos виражають дію, як процес; дію, яка відбувається в момент мовлення, підкреслюючи її тривалість. Часи групи Continuuos утворюються за допомогою допоміжного дієслова **to be** та Participle I (-**ing**) основного дієслова.

1. Дієслова у формі *Present Continuous* показують дію, яка відбувається (триває) в даний момент. Ця форма утворюється за допомогою допоміжного дієслова *to be* у формі *Present Indefinite* та форми *Participle I* змістового дієслова:

e.g.: is (are, am) + V (ing).

I **am reading** a grammar rule now. — \mathcal{A} читаю граматичне правило зараз. He **is doing** his hometask now. — Bін робить домашнє завдання зараз. They **are training** now. — Bони тренуються зараз.

2. У питальній формі допоміжне дієслово ставиться перед підметом: e.g.: **Am** I **reading** a grammar rule now? – Yes, I am.

No, I am not.

Is he doing his home task now? - Yes, he is.

No, he is not (isn't).

Are they training now? – Yes, they are.

No, they are not (aren't).

- 3. У заперечній формі частка **not** додається до допоміжного дієслова:
- e.g.: I am not reading a grammar rule now.

He is not (isn't) doing his hometask now.

They are not (aren't) training now.

4. Present Continuous вживається також для вираження запланованої

майбутньої дії, особливо з дієсловами, що означають рух:

e.g.: We are starting tomorrow morning. – Ми вирушаємо завтра вранці.

§7. The Past Continuous Tense

1. Дієслова у формі *Past Continuous* показують дію, яка відбувалася (тривала) в певний момент у минулому. Ця форма утворюється за допомогою допоміжного дієслова *to be* у формі *Past Indefinite* та форми *Participle I* змістового дієслова:

e.g.: was (were) + V (ing).

I **was reading** a grammar rule from 9 till 10 yesterday. — Я читав граматичне правило з 9 до 10 години вчора.

He **was doing** his hometask when you came. – *Він робив домашнє завдання*, коли ви прийшли.

They were training the whole morning yesterday. – Вони тренувалися весь ранок вчора.

2. У питальній формі допоміжне дієслово ставиться перед підметом:

e.g.: **Was** I **reading** a grammar rule from 9 till 10 yesterday? – Yes, I was. No, I was not.

Was he doing his hometask when you came? – Yes, he was.

No, he was not (wasn't).

Were they training the whole morning yesterday? – Yes, they were. No, they were not (weren't).

3. У заперечній формі частка **not** додається до допоміжного дієслова:

e.g.: I was not reading a grammar rule from 9 till 10 yesterday.

He was not (wasn't) doing his hometask when you came.

They were not (weren't) training the whole morning yesterday.

§8. The Future Continuous Tense

1. Дієслова у формі *Future Continuous* показують тривалу дію, яка відбуватиметься (триватиме) у певний момент у майбутньому. Ця форма утворюється за допомогою допоміжного дієслова *to be* у формі *Future Indefinite* та форми Participle I змістового дієслова:

e.g.: shall (will) be + V (ing).

I **shall be reading** this sport article from 5 till 6 tomorrow. — Я читатиму цю спортивну статтю з 5 до 6 години завтра.

He will be doing his hometask when you come. (Правило заміни

майбутнього часу на теперішній у підрядних часу і умови). — Bін робитиме домашнє завдання, коли ти прийдеш.

They **will be training** the whole evening tomorrow. — *Вони тренуватимуться весь вечір завтра*.

- 2. У питальній формі перше допоміжне дієслово ставиться перед підметом:
 - e.g.: **Shall** I **be reading** this sport article from 5 till 6 tomorrow? Yes, I shall. No, I shan't.

Will he be doing his hometask when you come? – Yes, he will.

No, he won't.

Will they be training the whole evening tomorrow? – Yes, they will. No, they won't.

- 3. У заперечній формі частка **not** додається до першого допоміжного лієслова:
 - e.g.: I **shall not (shan't) be reading** this sport article from 5 till 6 tomorrow.

He will not (won't) be doing his hometask when you come.

They will not (won't) be training the whole evening tomorrow.

§9. The Present Perfect Tense

Часи групи Perfect виражають дію, як результат; дію, яка закінчилася до певного моменту у минулому, теперішньому чи майбутньому часі, але пов'язана з ним у вигляді якогось результату. Часи групи Perfect утворюються за допомогою допоміжного дієслова **to have** та Participle II (-ed; III f.) основного дієслова.

1. Дієслова у формі *Present Perfect* показують дію, яка відбулася до моменту мовлення, але пов'язана з ним у вигляді якогось результату. Ця форма утворюється за допомогою допоміжного дієслова *to have* у формі *Present Indefinite* та форми *Participle II* змістового дієслова:

e.g.: have (has) + Participle II

I **have** already **read** this sport news. – Я вже прочитав ці спортивні новини. Не **has** just **done** his favourite exercise. – Він щойно виконав свою улюблену вправу.

They have already trained. – Вони вже потренувалися.

- 2. У питальній формі допоміжне дієслово ставиться перед підметом:
- e.g.: **Have** I already **read** this sport news? Yes, I have.

No, I have not.

Has he done his favourite exercise? – Yes, he has.

No, he has not (hasn't).

Have they already trained? – Yes, they have.

No, they have not (haven't).

3. У заперечній формі частка **not** додається до допоміжного дієслова:

e.g.: I have not read this sport news.

He has not done his favourite exercise.

They haven't trained yet. – Вони ще не потренувалися.

§10. The Past Perfect Tense

1. Дієслова у формі *Past Perfect* показують дію, яка відбулася до певного моменту у минулому. Ця форма утворюється за допомогою допоміжного дієслова *to have* у формі *Past Indefinite* та форми *Participle II* змістового дієслова:

e.g.: had + Participle II

I **had read** this sport news before my friend told me about it. $- \mathcal{A}$ прочитав ці спортивні новини до того, як мій друг розповів мені про них.

He **had done** his morning exercises by 7 o'clock. – Він зробив зарядку до 7 години.

They **had trained** before his coach came. – Вони потренувалися до того, як прийшов тренер.

2. У питальній формі допоміжне дієслово ставиться перед підметом:

e.g.: <u>Had</u> I read this sport news before my friend told me about it? – Yes, I had.

No, I had not.

<u>Had</u> he **done** his morning exercises by 7 o'clock? – Yes, he had.

No, he had not (hadn't).

<u>Had</u> they trained before his coach came? – Yes, they had.

No, they had not (hadn't).

3. У заперечній формі частка **not** додається до допоміжного дієслова:

e.g.: I had not read this sport news before my friend told me about it.

He had not done his morning exercises by 7 o'clock.

They had not trained before their coach came.

§11. The Future Perfect Tense

1. Дієслова у формі Future Perfect показують дію, яка відбудеться до

певного моменту у майбутньому. Ця форма утворюється за допомогою допоміжного дієслова to have у формі Future Indefinite та форми Participle II змістового дієслова:

e.g.: will have + Participle II

I will have read this sport news before my friend tells me about it. - Я прочитаю ці спортивні новини до того, як мій друг розповість мені про них.

He **will have done** his morning exercises by 7 o'clock. – Він зробить зарядку до 7 години.

They will have trained before their coach comes. – Вони потренуються до того, як прийде тренер.

- 2. У питальній формі перше допоміжне дієслово ставиться перед підметом:
- e.g.: Will I have read this sport news before my friend tells me about it? Yes, I will.

No, I will not.

Will he have done his morning exercises by 7 o'clock? – Yes, he will. No, he will not (won't).

<u>Will</u> they **have trained** before their coach comes? – Yes, they will. No, they will not (won't).

3. У заперечній формі частка **not** додається до допоміжного дієслова: e.g.: I **will <u>not</u> have read** this sport news before my friend tells me about it. He **will <u>not</u> have done** his morning exercises by 7 o'clock. They **will not have trained** before their coach comes.

REFERENCES

- 1. Libre Texts. Chemistry. Retrieved from:
 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM
 100 Fundamentals of Chemistry/01%3A The Chemical World
- 2. Libre Texts. Chemistry. Retrieved from:
 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM_100Fundamentals_of_Chemistry/01%3A_The_Chemical_World/1.7%3A_Physical_and_Chemical_Changes
- 3. Libre Texts. Chemistry. Retrieved from:

 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM_100_-

 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM_100_-

 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM_100_-

 https://chem.libretexts.org/Courses/Palomar_College/PC%3A_CHEM_100_-

 https://chemistry/01%3A_The_Chemical_World/1.7%3

 A.Physical_and_Chemical_Changes

 https://chemical_World/1.7%3

 A Physical_and Chemical_Changes
- 4. What Branch of Chemistry is Analytical Chemistry? Retrieved from: https://www.gcu.edu/blog/medical-studies-sciences/what-branch-chemistry-analytical-chemistry
- 5. Organic Chemistry. Retrieved from:
 https://courses.lumenlearning.com/suny-potsdam-organicchemistry/chapter/1-1-introduction-to-organic-chemistry/
- 6. Inorganic Chemistry (journal). Retrieved from: https://en.wikipedia.org/wiki/Inorganic_chemistry
- 7. Biochemistry Science. Retrieved from: https://www.britannica.com/science/biochemistry
- 8. Polymer Chemistry. Retrieved from: https://www.britannica.com/science/polymer
- 9. John and Liz Soars. New Headway. English Course. Oxford University Press, 2000
- 10. English ESL Worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/general-topic/people/meeting-new-people/143637
- 11. British Council: Learning English. Retrieved from: https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs+worksheets&sca_esv=555442
 https://www.google.com/search?q=jobs-worksheets&sca_esv=555442
 <a href="https://www.google.com
- 12. British Council: Learning English. Retrieved from: https://learnenglishteens.britishcouncil.org/sites/teens/files/job_adverts_exercises_2.pdf
- 13. English ESL worksheets. Retrieved from: https://en.islcollective.com/english-esl-worksheets/speaking-practice/warmer-filler-cooler/opposites/synonyms-and-antonyms/1927

14. English ESL worksheets. Retrieved from: https://en.islcollective.com/

CONTENT

UNIT I Chemistry as a Science

Lesson 1 The Scope of Chemistry

Lesson 2 Matter and its States

Lesson 3 Physical Changes

Lesson 4 Chemical Changes

Lesson 5 Chemical Reactions

UNIT II Chemistry Subdisciplines

Lesson 1 Analytical Chemistry

Lesson 2 Inorganic Chemistry

Lesson 3 Organic Chemistry

Lesson 4 Biochemistry

Lesson 5 Polymer Chemistry

UNIT III General English

Lesson 1 Meeting People

Lesson 2 Where do you live?

Lesson 3 Letters

Lesson 4 Different People

Lesson 5 Seasons

UNIT IV General English

Lesson 1 Opposites

Lesson 2 Two Famous Firsts

Lesson 3 The World of Work

Lesson 4 Weekdays and Weekends

Lesson 5 Cities of the World

UNIT V Grammar

Lesson 1 Noun

Lesson 2 Adjective. Numeral

Lesson 3 Verb. Present Simple

Lesson 4 Past Simple

Lesson 5 Future Simple

UNIT VI Grammar

Lesson 1 Present Continuous

Lesson 2 Past Continuous. Future Continuous.

Lesson 3 Present Perfect

Lesson 4 Past Perfect

Lesson 5 Active Voice

Граматичний довідник

References

Content

Навчальне видання

Укладачі: Куліш І.М., Зінченко А.В.

English for Chemists

Навчальний посібник для студентів спеціальності «Хімія»

Тираж 50 примірників Ум.друк.арк. 6,25 Підписано до друку 22.01.2024 Друк ФОП Нечитайло О.Ф. Україна, м.Черкаси Вул.О.Дашкевича, 39 Тел. (0472)366260

Свідоцтво до внесення до державного реєстру Субєктів видавничої справи АВ № 488421 від 18.10.2013.