INTRODUCTION

The Earth: Fast Facts

Our planet Earth is a world unlike any other. The Earth is the only place in the universe that hosts life.

The Earth is the only planet in the solar system not named after a mythological being. Its name is derived from the Old English word "ertha" and the Anglo-Saxon word "erda". These two words mean ground or soil.

The gravity between the Earth and the Moon is the cause of tides on Earth.

The rotation of the Earth is gradually slowing down. The deceleration of the Earth's rotation is very slow, approximately 17 milliseconds per hundred years. Eventually, this will prolong days but it will take around 140 million years before our day will have increased from 24 to 25 hours.

The length of a year on the Earth is 365 days, 6 hours, and 16 minutes.

The length of a day on the Earth is 23 hours and 56 minutes.

The Earth is composed of several layers. A rocky layer called the Earth's crust is on the outside. Below one can find the mantle followed by the outer core and the inner core.

Planet Earth is made up of a number of elements. **The Earth is Mostly Iron, Oxygen and Silicon.**

If you could separate the Earth into piles of material, you'd get 32.1 % iron, 30.1% oxygen, 15.1% silicon, and 13.9% magnesium. Of course, the core of the Earth consists mostly of this iron. If you could act down and sample the core, it would be 88% iron. And if you sampled the Earth's crust, you'd find that 47% of it is oxygen.

The Earth has a powerful magnetic field.
This field protects the Earth from the effects of solar wind.

The Earth has a radius of 3,959 miles. It is the fifth-largest planet in our solar system. It is the only planet known to have liquid water on its surface.

Oceans at least 4 kilometers deep cover about 70 percent of the Earth's surface.

The minimum weather temperature on the Earth is -87.8 degrees Celsius and the maximum weather temperature on the Earth is s 57.8 degrees Celsius.

Freshwater exists in the liquid phase only within a narrow temperature range between 0 and 100 degrees Celsius.

The Earth's weather depends greatly on the presence and distribution of water vapor in the atmosphere.

UNIT 1.

Exercise 1. Read and translate the text. Learn unknown words.

Geography

Geography is a study of the planet Earth. Geographers describe and analyze the physical characteristics of our planet and the ways in which people interact with these physical characteristics and with each other.

Throughout history, people who went even short distances from where they lived became aware of differences that distinguish one place from another and one group of people from another. Many of these travelers formed mental images of the places that they had visited and told others what they had seen. To improve the accuracy of their descriptions, they scratched crude on rocks or pieces of cloth or leather.

As you already know, geography is the study of the relationship between people and their physical surroundings or environments. This science grew directly out of early explorers' attempts to describe what they had seen on their travels. Today those who study geography describe and analyze the earth to explain what is where, why it is there, and what significance it has.

The Earth is only one of nine planets in our solar system that revolves around the sun (a minor star in the universe). The Earth is the third planet in distance from the sun, which is 150 million kilometers away. Even though the sun is considered to be one of the smaller stars in the universe, it is huge when compared to the Earth.

The sun's heat and light provide most of the energy that makes life on the Earth possible.

Exercise 2. Give equivalents for:
Планета Земля, physical surroundings, взаємодіяти, analyze the physical characteristics, розрізняти, to improve the accuracy of the descriptions, сонячна система, early explorers, карти та описи, to revolve around the sun, забезпечувати, the sun's heat and light.

Exercise 3. Find a synonym or meaning for the following words.

to become aware	to mark the surface of something with a sharp or pointed object
to distinguish	an effort to achieve or complete a difficult task or action
to scratch	to make or become better
to improve	to apprehend
an attempt	importance
significance	recognize or treat (someone or something) as different

Exercise 4. Develop your reading skills. Read the following text and do the comprehension tasks.

1. Geographers deal with the cultural properties of the Earth. ***TRUE / FALSE***
2. Geography is a study of economic relations between nations. ***TRUE / FALSE***
3. The first maps appeared on the walls of the houses people lived in. ***TRUE / FALSE***
4. The Earth is much bigger than the Sun. ***TRUE / FALSE***
5. Geography as a science appeared because of people's desire to invent something new. ***TRUE / FALSE***
6. The Earth is the closest planet to the Sun. ***TRUE / FALSE***
7. The Sun is the biggest star in the universe. ***TRUE / FALSE***
8. All living organisms can exist thanks to the energy from the Sun. ***TRUE / FALSE***

Exercise 5. Answer the questions:

1. What is the task of geographers?
2. When did the first maps appear?
3. For what purposes were they used initially?
4. What is the characteristic feature of the Earth?
5. What is the distance between our planet and the sun?
6. What makes life on the Earth possible?

Exercise 6. Complete the sentences:

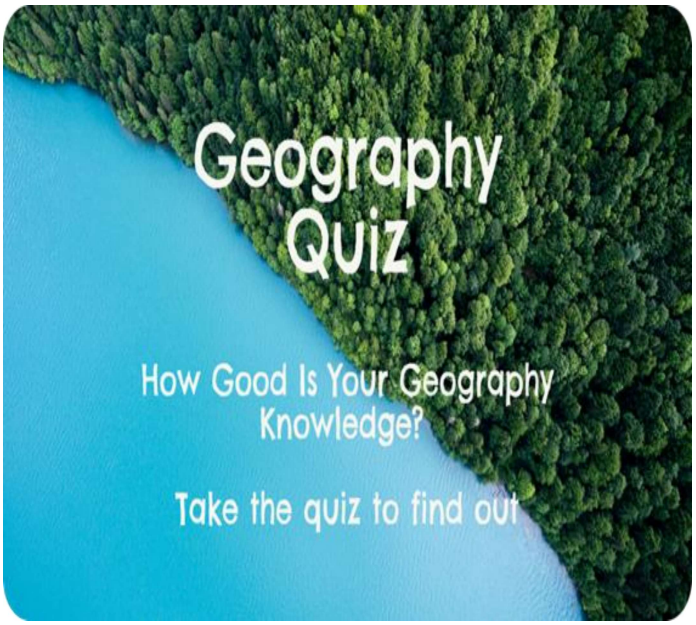
1. Most of the energy is provided by ….
2. Earth is …. planet in distance from the sun.
3. Geography is the study of the relationship between people and their ….
4. Many of the early travelers formed …. of the places they had visited.
5. The Earth is only one of nine planets in our … that revolves around the sun.

Exercise 7. Read the sentences and look at the highlighted prepositions. Choose the word that is followed by each preposition and fits the content.

1. Geography is a science *devoted / familiar / interested* **to** the study of land, its properties as well as relationships between people and their environments.
2. To understand the present, people require knowledge of the past. That is why a great deal of emphasis is *put / taken / shown* **on** historical geography.
3. Digital revolution has greatly changed the practice and study of geography. Modern geographers are *studied / endangered / equipped* with sophisticated programs that help them in their work.
4. Students can study how humans can *exhibit / eliminate / interact* **with** their environments.

5. To gather and analyse topics geographers use GIS (Geographic Information Systems). I haven't *noticed / recognized / heard / realized* **of** them before.
6. A wide variety of graphics is used by *specialists in regard / in order / in memory* **to** present the information they have gathered.

Exercise 8. You are a participant of the students' conference and preparing a short report about geography.



Geography is an interesting subject that covers a lot of areas. You can find many facts about our planet Earth, get acquainted with new lands and their inhabitants, study nature and environment. Take a short quiz to find out if you know our planet well.

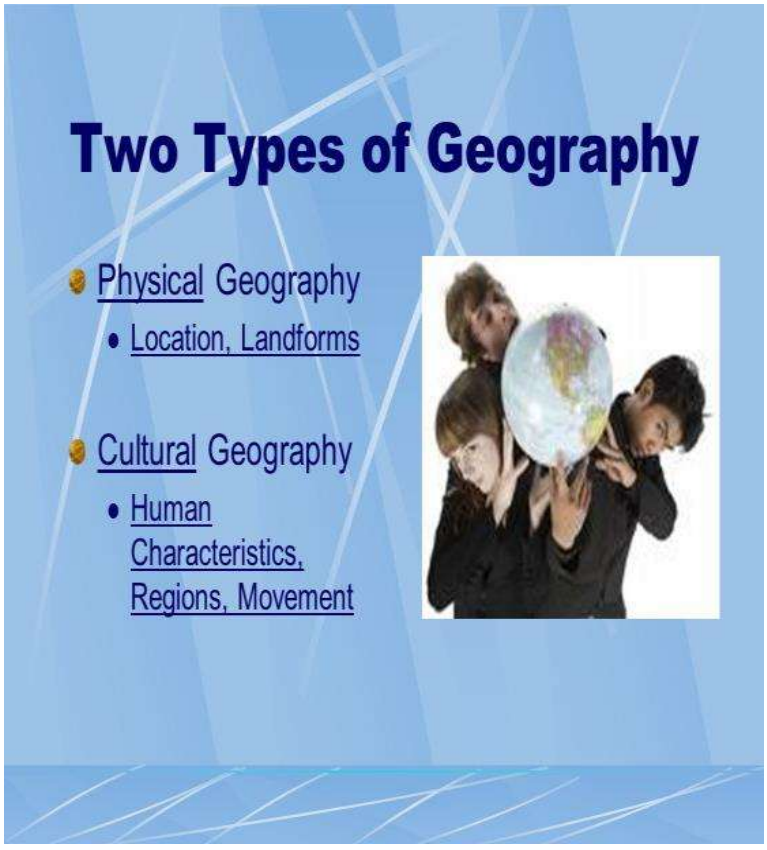
1. What is the largest country in the world?
2. What is the most densely populated country in the world?
3. How many oceans are there in the world? Name them.
4. What is the biggest ocean on the Earth?
5. What are the largest in the area and the smallest continents?
6. Which planet is nearest to the Earth?
7. In which country would you find the Leaning Tower of Pisa?
8. How many states do the United States consist of?
9. How many regions does our country consist of?
10. What is the largest waterfall in the world?
11. What is the biggest desert in the world?
12. What is the hottest continent on the Earth?
13. What is the highest mountain in the world?

14. What is the coldest place on the Earth?
15.What continent is Britain part of?
16. Which rivers flow through the territory of Ukraine?
17. What is the longest river in Ukraine?
18. What do you call land with water on 3 sides?
19. Where are the Andes mountains located?
20. What are horizontal and vertical imaginary lines around the earth called?

UNIT 2.

Exercise 1. Read and translate the text. Learn unknown words.

Physical and Cultural Geography



Most geographers focus on one of the two major branches of geography, ***physical geography, and cultural geography***.

Physical geography is the branch of natural science which deals with the processes in the natural environment such as the atmosphere, hydrosphere, biosphere, and geosphere.

Physical geography studies our planet as a whole and its systems in particular. The aim of scientists engaged in this branch is to examine landscapes, surface processes, and climate of the earth. All these issues are of great importance as their smallest changes affect people now and can alter their future.

The study of Earth is huge, that is why numerous sub-branches of physical geography specialize in different areas. Have you heard anything about geomorphology, hydrology or pomology? They are important for studying our planet because all natural processes of Earth affect the distribution of resources and conditions of the human settlement.

Cultural geography

Cultural geography is one of the two major branches of geography. It is often called human geography. Cultural geography is the study of many cultural aspects one can found throughout the world. In contrast to physical geography, cultural geography focuses on the impact of human ideas and actions on the earth.

Language, religion, different economic and governmental structures, art, music, as well as other cultural aspects are those phenomena that are objects of cultural geography.

Each group of people has a strong effect on its human habitat or the place where that group lives. This imprint is defined as *the cultural landscape.* Examples of cultural landscapes include the fields people clear and farm, the crops and livestock they raise, and the style and distribution of the villages and cities they build.

Another aspect that is thoroughly studied by geographers is the process of cultural diffusion. In other words, it is spreading of parts of a culture from one area to another. The spread of Christianity from Palestine to other parts of the Middle East and to Europe can be viewed as an example of cultural diffusion. The spread of the alphabet is another example. Initially originated in the Middle East about 2000 B. C., it gradually spread to most parts of the world. Today many different cultures use various forms of the alphabet to write their languages. The process of cultural diffusion continues.

Exercise 2. Give equivalents for:

To focus on, поширення алфавіту, to spread, змінювати навколишнє середовище, cultural landscapes, сільськогосподарські культури, cultural diffusion, розводити тварин, to change the habitat, набувати (здобувати), the earth's surface, вплив людської діяльності, major branches of geography.

Exercise 3. Insert the prepositions if necessary:

The process … cultural diffusion; the spread … culture … one area … to another; … contrast … physical geography; two major branches … geography; to leave a distinct imprint … the human habitat; to use various forms … the alphabet; changes … the earth's surface.

Exercise 4. Answer the questions:

1. How did the study of geography develop?
2. What do modern geographers study?
3. What are the two main branches (subdivisions) of geography?
4. What are the subjects of physical geography?
5. What aspects is cultural geography concentrated on?
6. Give the definition of the term "cultural landscape".
7. Give examples of cultural diffusion today.

Exercise 5. Look at these words and write their synonyms, a definition or your own sentence to show that you understand their meaning.

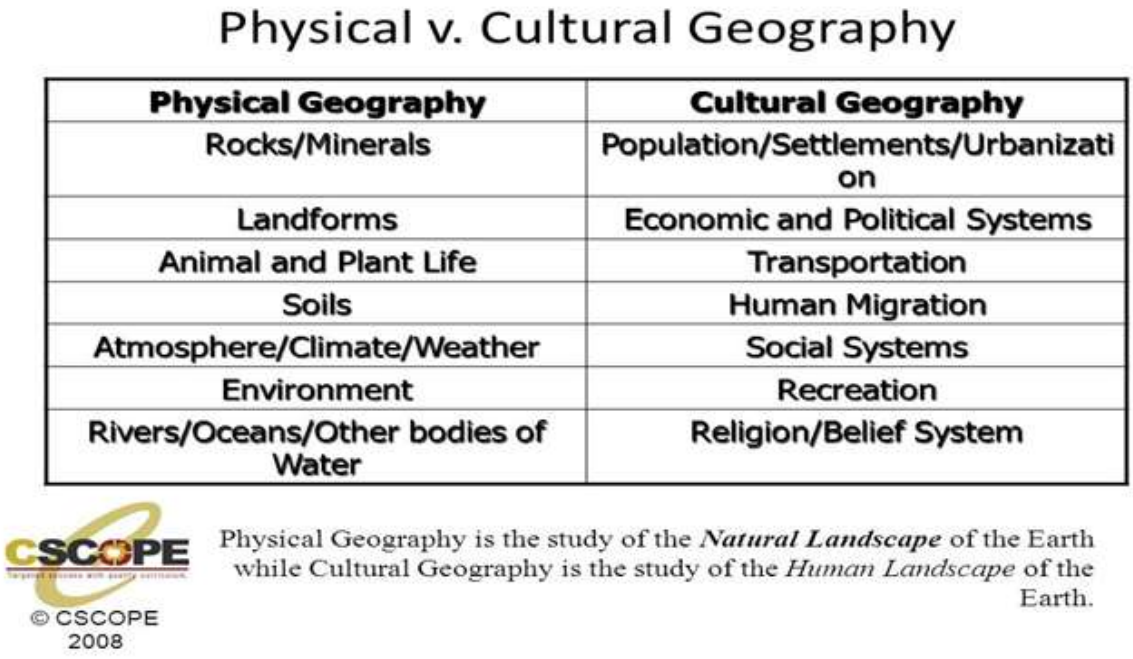
to focus on, to offer, to occur, evident, remote, imprint

Example: If something is evident, it is obvious and easy for understanding.

Exercise 6. Match the following terms with their definitions.

1	Geomorphology	f	the study of glaciers and ice sheets, including their formation, cycles, and effect on the Earth's climate.
2	Hydrology	b	the study of soil, including formation, different types as well as their distribution over the Earth
3	Glaciology	c	the study of the Earth surface and its processes. The objects of study are various processes such as soil erosion, landslides, volcanic activity, earthquakes, floods etc.
4	Pedology	d	the study of the water cycle, water distribution across the planet as well as water quality

Exercise 7. Look at the picture. Prepare a short report about the areas each branch of Geography studies. Search for some new information about any subdivision of geography. Be ready to present it to your group mates.



Exercise 8. Read the information about famous people who studied geography. Open the brackets and write the necessary tense form of the verb. Find more information about famous geographers and present it in the classroom.

1. Prince William (the Duke of Cambridge) studied geography at the University of St. Andrews in Scotland. He (to receive) his Master's degree in 2005. He (to apply) his navigation skills during the service in the Royal Air Force as a helicopter pilot.
2. A well-known basketball player Michael Jordan (to graduate) with a degree in geography in 1986. He (to take) several courses in the regional geography of the Americas.
3. Ellen Churchill Semple (to be born) on January 8th, 1863 in Kentucky. She (to study) history but (to become) interested in geography when she (to visit) England. She (to become) the first woman to hold the position of the president of the Association of American Geographers.
4. Claudius Ptolemy (to be) a famous geographer of the ancient Roman Empire. He (to live) from the years 100 to 170 AD. In his famous work "Geography" he (to speak) about difficulties of mapping.

UNIT 3.

Exercise 1. Read and translate the text. Learn unknown words.

Geographers use a wide range of tools which help them perform their work. Globes and maps are those things that most people are familiar with. Other advanced tools represented by different computer programs, aerial photographs and satellite images are of

great help and importance to modern geographers. All these tools help scientists to analyze the interactions between people and their environments.

Globes and maps represent useful models of the earth. However, they are not able to provide perfect representations of the earth. Both of them have specific advantages as well as disadvantages.

Globes.

A globe is a spherical model of the Earth. It does not distort the surface it portrays. It is the most accurate representation of the shape of the Earth. The landmasses and bodies of water on the globe have the same shapes as on the Earth's surface.

Besides, a globe accurately represents the earth's grid of parallels and meridians, as well as direction and distance from one place to another. The most important advantages of globes are apparently connected with their shape.

Unfortunately, globes are not practical to use. They are too big and bulky to carry around. Moreover, people can view only one half of a globe at a time.

Another disadvantage of globes concerns the problem of detail. Because globes represent the entire earth, the individual areas are relatively small. It is impossible to show details of small geological features or manmade features like small cities.

It becomes obvious that globes are not able to show the detailed features of an area.

Exercise 2. Give equivalents for:

useful models of the earth, переваги та недоліки, the most accurate representation, поверхня, the earth's grid of parallels and meridians, напрям та відстань між містами, too big and bulky,

протилежна сторона глобуса, the detailed features of an area, стосуватися, to use different tools, взаємодія між людьми та навколишнім середовищем, to carry out the work.

Exercise 3. Find a synonym or meaning for the following words.

tool	correct, exact, and without any mistakes
accurate	whole
concern	taking up much space; large and unwieldy
entire	something that helps you to do a particular activity:
bulky	change
variety	relate to; be about

Exercise 4. Answer the questions:

1. What tools do geographers use?
2. What are the oldest tools?
3. What are the advantages of spherical models of the Earth?
4. Name major disadvantages of globes.

Exercise 5. Rearrange the letters in the anagrams to form equivalents for the Ukrainian words.

різномаїття - **tyrieva**	Земля - **Eraht**
перевага - **aantadvge**	характерна риса - **fateeur**
забезпечувати - **pdroevi**	струмки - **esmatsr**
поверхня - **eaurscf**	порівнювати - **oacpmre**
масштаб - **lcsae**	інструменти - **olsot**

Exercise 6. Complete the facts. Use:

discovered, produced, peaked, survives, antiquity, tools, places

1. People have used globes to model the world around them since …….
2. The earliest globe that …… today was made in 1492 by Martin Behaim, a German navigator and geographer.
3. Not only the lands …… by explorers were shown on it.

4. It represented details about oversees commodities, market …… and local trading protocols.
5. Pocket globes were first ……. in England by Joseph Moxon in 1673. The diameter of pocket globes was around three inches.
6. These globes had several functions. Gentlemen could use these miniature instruments as status symbols. They were also educational ……. for children.
7. Although the popularity of pocket globes ……. in the first half of the 18th century, makers continued to produce them in the 19th century.

Exercise 7. Fill in the missing forms of the words. Choose any 6 and write your own sentences with them.

Noun	Verb	Noun	Adjective
description		difference	
	compare		evident
	interact	distinction	
attempt			various
	distort		important
analysis			practical
	develop	science	
	discover	significance	

Exercise 8. Read the text about maps and do the tasks suggested below.

A. Fill in the necessary prepositions: *in, into, of, by, at, on.*

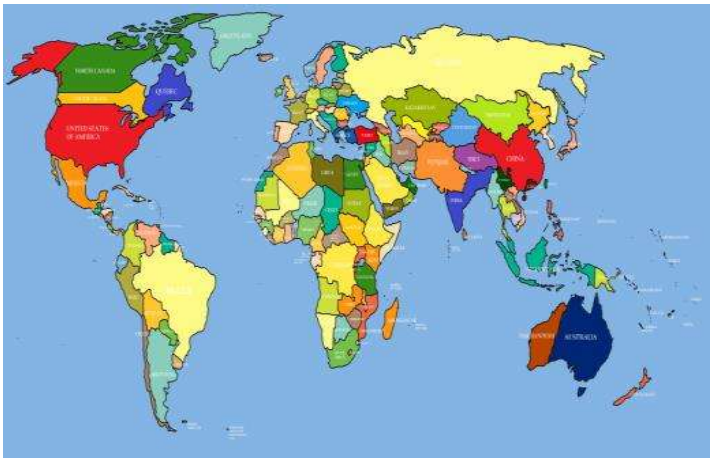
Maps

Maps are flat representations … the Earth. Maps vary … size. There are tiny maps one can put … the pocket as well as huge wall maps used during the classes. The purpose of maps can also vary.

Speaking about maps it is worthwhile mentioning their convenience to use. It is one of the most obvious advantages of maps over globes. If there arise a necessity, they can be easily

rolled, folded and carried around. Another advantage of maps is that they can show the earth's entire surface … one time, or can show specific details. Maps can also present information concerning various topics related … physical and cultural features of the earth. The regions … heavy rainfalls or floods, deposits … mineral resources, different religions can be illustrated … maps by means of different colors and symbols.

On the other hand, it is impossible to show accurately a three-dimensional object like the earth on a flat, two-dimensional map.



For this reason, all maps have one or more inaccuracies, called distortions. The distortions remain the essential disadvantage of maps.

B. Find synonyms to the underlined words among the suggested ones.

obvious	deformations
features	stay
reason	aim
distortions	evident
remain	characteristics
purpose	cause
vary	appear
arise	change

C. Choose the odd word out.

1	vary	exist	change	alter
2	purpose	aim	objective	reason
3	features	advantages	peculiarities	characteristics
4	arise	appear	emerge	disappear
5	evident	disputable	obvious	manifest

Exercise 9. Look through the text above and complete the table with your own ideas.

ADVANTAGES	DISADVANTAGES
Paper maps are tangible. They can be seen and touched.	*Paper maps are printed on paper that can easily be damaged as a result of unfavourable weather conditions.*
Paper maps don't need battery power and are of great help in the most remote areas. *They do not require internet connections every time to access.*	*All maps have distortions because it is impossible to represent accurately a three-dimensional objects on flat maps.*
Maps can show the Earth's entire surface or just a small part of it.	*Paper maps are an old way of representing an area and may be difficult to understand because of symbols used on them.*
…… ……	…… ……
…… ……	…… ……

UNIT 4.

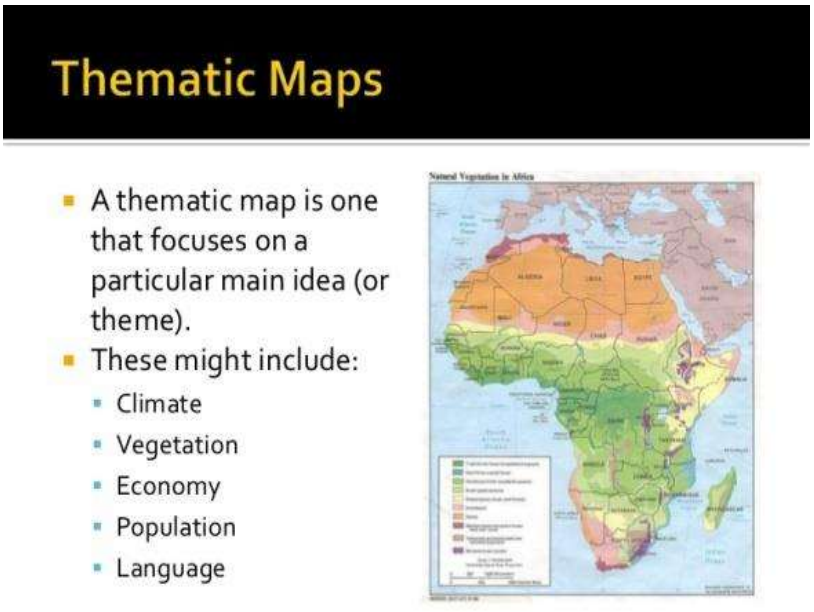
Exercise 1. Read and translate the text. Learn unknown words.

Different Types of Maps

In order to study thoroughly the features of the earth the science of geography relies on many different types of maps. Some maps are so common to us that even a pupil would recognize them. We refer to them during our trips, in school classrooms and in daily lives for information. Other maps are used only by professionals in specialized fields.

What Is a Map?

A map is a visual representation of the whole area or a part of it. It's not only a representation of the Earth's surface. Maps represent various things such as national boundaries, physical features, climates, population, the locations of cities, economic activity and so on. For this very reason we can mention different types of maps.



Thematic maps display specific data which can include, for instance, the average rainfall distribution for a certain area or the distribution of a particular disease throughout a country.

With the increased use Geographic Information Systems (GIS), thematic maps are growing in importance and becoming more readily available. Furthermore,

the digital revolution of the 21st century has contributed much to the shift from paper maps to electronic ones.

Below you can find a list of the most common types of maps used by geographers.

Political Maps

A political map does not show topographic features like mountains. It is a type of the map that represents political divisions, or human-created boundaries of the world, continents and major geographic areas.

Political maps can vary in size and content. Some political maps cover entire continents, while others may include the locations of cities, depending on the detail of the map. Each political map can also focus on different types of political features.

A common type of political map would be one showing the regions of our country and their borders along with the Ukraine's international borders.

Physical Maps

Physical maps are used demonstrate the physical features of an area, such as mountains, rivers and lakes. Blue colour is usually used to indicate rivers, lakes, seas and oceans. Light blue color is used for the shallowest areas and darkening for areas of deeper water. Glaciers and ice caps are shown in white colors. Brown colour indicates

mountains and plateaus, different shades of green are used to represent elevations.

Topographic Maps

A topographic map is similar to a physical map as it shows different physical landscape features. These features include:

cultural: roads, buildings, railways, airports, administrative boundaries, state and international borders;

hydrography: lakes, rivers, streams, swamps;

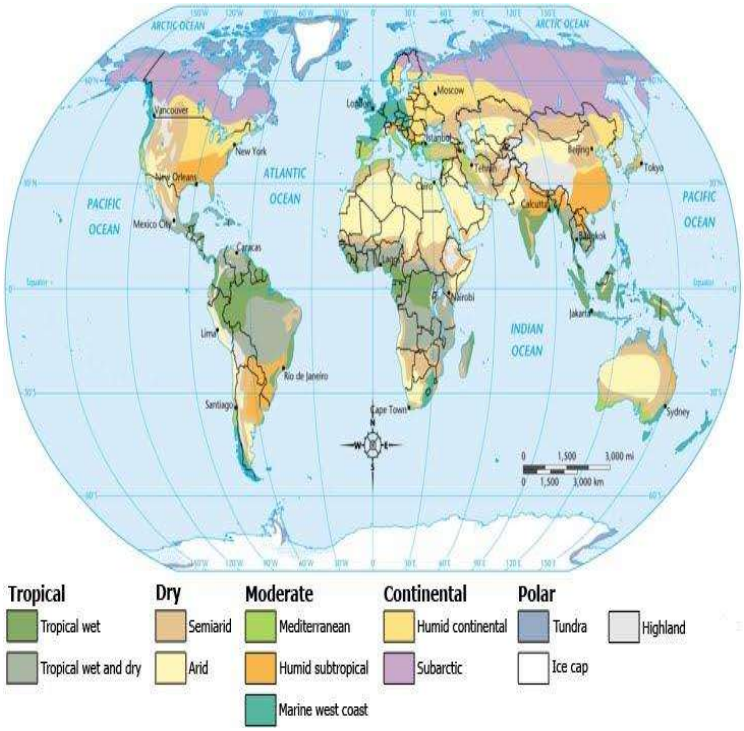
relief: mountains, valleys, cliffs;

vegetation: wooded and cleared areas, vineyards and orchards.

Changes in the landscape are shown by means of contour lines. These lines normally spaced at regular intervals to show elevation changes and when lines are close together the terrain is steep.

Climate Maps

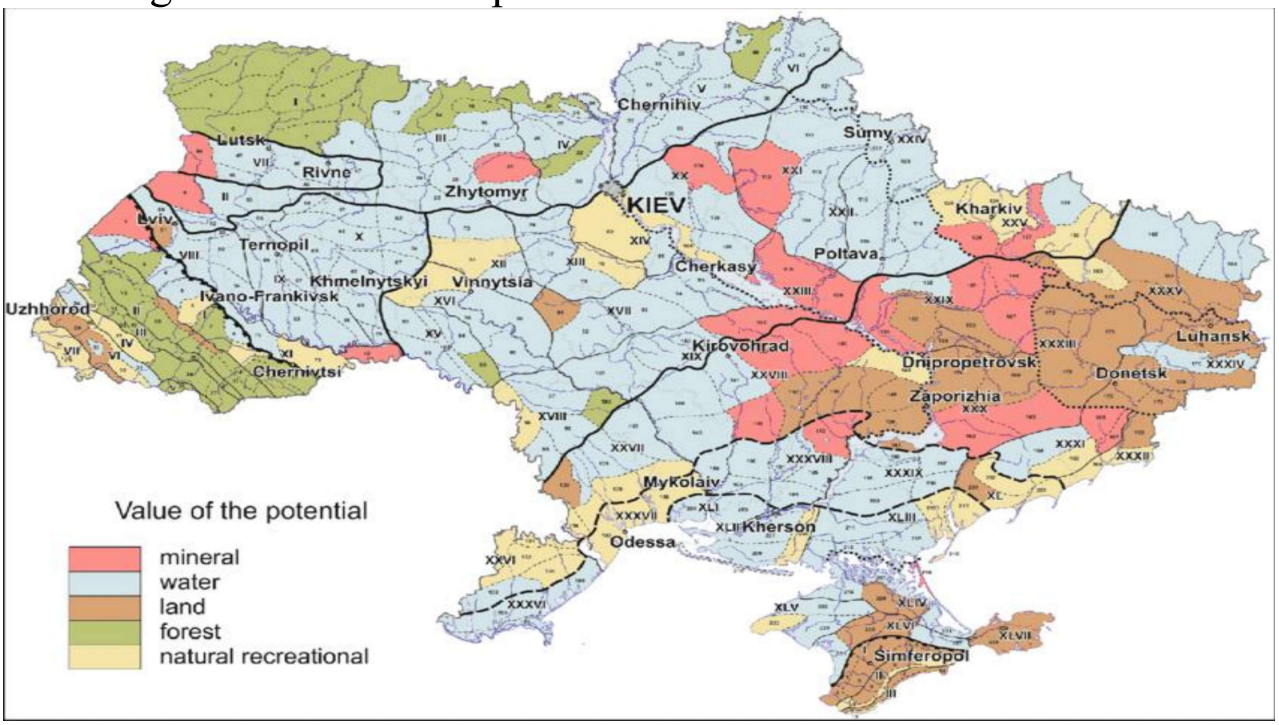
A climate map shows information about the territorial distribution of climatic conditions based on the results of long-term observations. Climatic maps are compiled for individual climatic features (temperature, precipitation, humidity) and for combinations of them at the earth's surface.



They can show the amount of snow or rain an area receives or the average number of cloudy or sunny days. These maps normally use colors to show different climatic areas.

Economic or Resource Maps

An economic or resource map display information based on specific types of economic activity or natural resources available in an area. The knowledge about the type of resources available will help to determine which types of industries will be able to thrive in that area. Different symbols or colors are used depending on what is being shown on the map.



For example, this map shows the availability of water, mineral, land resources as well as forest and natural recreational zones found in particular regions of our country.

Road Maps

A road map is one of the most widely used map types. These maps display roads and transport links, major and minor highways as well as things like airports, city

locations and places of interest such as parks, campgrounds, and monuments. Major highways on a road map are generally shown in red and larger than other roads, while minor roads are a lighter color and a narrower line.

Exercise 2. Give equivalents for:

економічна діяльність, бути схожим до фізичної карти, використовувати контурні лінії, показувати зміни в ландшафті, головні автошляхи, кордони країни, специфічні кліматичні зони, кількість снігу, види сільськогосподарських культур, цифрова революція, опис, поверхня землі.

Exercise 3. Answer the questions:

1. What is a map? What types of maps do you know?
2. What does the political map show?
3. What information can one get from the thematic map?
4. How are the road maps used?
5. How are maps useful to us?

Exercise 4. Form nouns derived from the words in bold. Translate the information below and get ready to speak about various symbols used in different types of maps.

We use **–ance** (appear –appearance), **-ery/-ry** (slave – slavery), **-ion/-ation** (admire – admiration), **-ment** (move – movement) to form nouns.

Scale of a Map

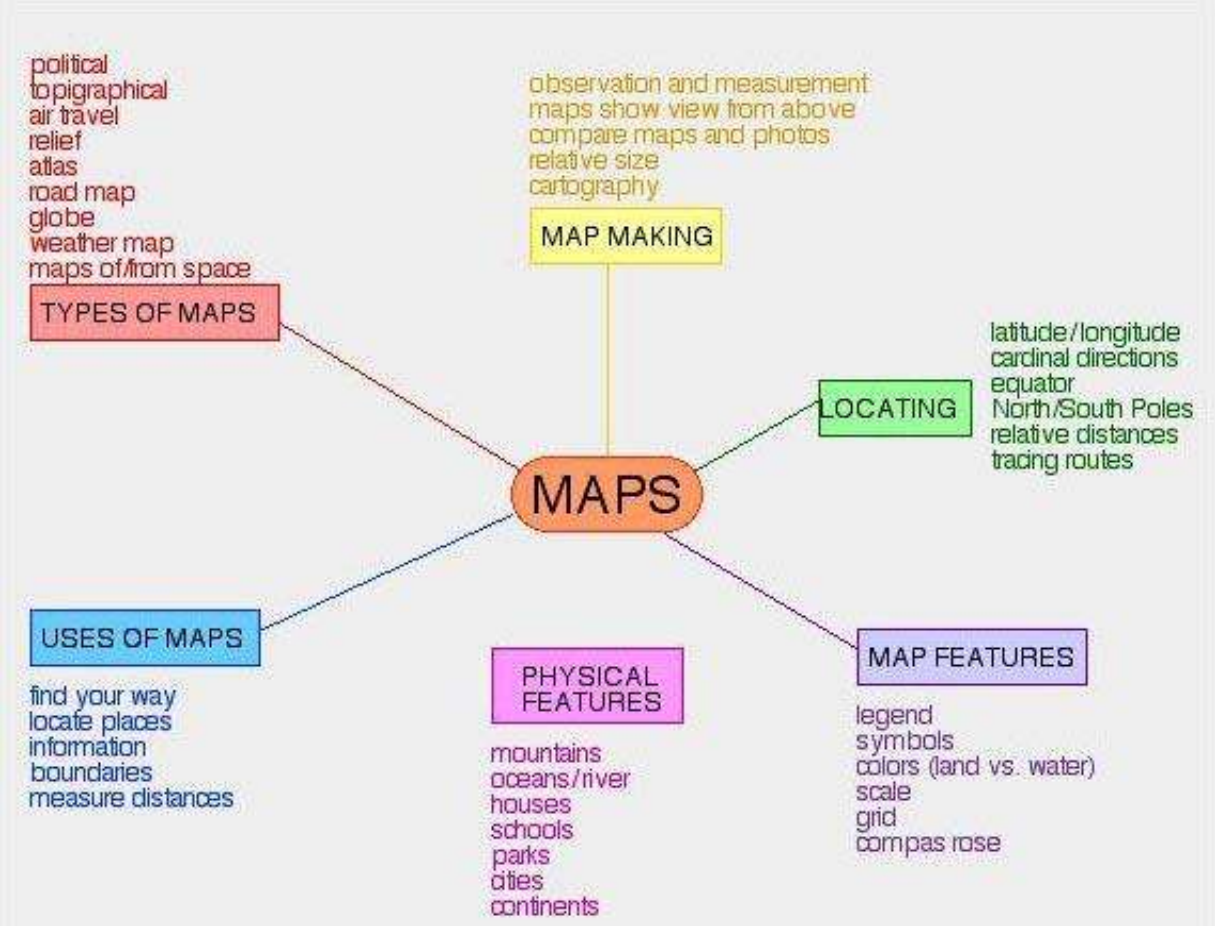
1. All maps are viewed as model ……. of the real world, that is why the features are reduced in size. **(REPRESENT)**
2. In other words, the scale of a map is the ……. between distance on a map and the corresponding distance on the ground **(RELATE).** For example, on a 1:100000 scale map, 1cm on the map equals 1km on the ground.
3. So, you will get a ……. of the distance between two places by means of a scale. **(MEASURE)**

Symbols

Symbols are small pictures that stand for different features on a map. A symbol is usually similar to what it represents.

1. For example, a triangular shape is often used for …… of a mountain. **(DENOTE)**
2. Black dots are ……. of cities, circled stars represent capitals. **(REPRESENT)** Different types of lines represent roads, highways and railways.
3. All the symbols for a map are often grouped together in a MAP KEY for ……. **(REFER).**
4. MAP KEY is an ……. of symbols in a box **(ARRANGE).** Their purpose is to make it easier for us to study and understand the map.

Exercise 5. Speak about the role and uses of maps in today's society. The picture below will help you to reveal the topic.



1. The map that shows the weather of a specific area is called a …..
A. weather map
B. road map
C. population map
D. political map

2. Weather maps show average elevations in a specific area. True False

3. The purpose of the road map is ……
A. to show the history of an area.
B. to It use boundary lines.
C. to show elevations.
D. to show the types of roads in an area.

4. A ……. shows the elevation, vegetation, or some other physical features of the land.
A. population map
B. physical map
C. time-zone map

5. The areas in which people live are depicted on a …….
A. population map
B. physical map
C. political map

6. A person needs a ……..…for reading and understanding a map.
A. map key
B. scale
C. title

D. all of the above

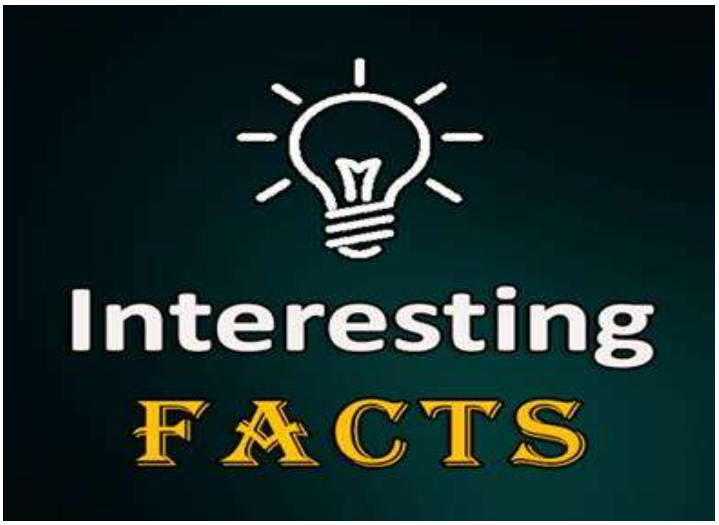
7. A round view of the world is represented by means of a (an) …….
A. globe
B. sketch
C. road map
D. none of the above

8. How does a map scale help you to read a map?
A. it helps to show what things stand for
B. it is a tool used for measuring distance
C. it tells what mountains and plains are on the map
D. it tells how heavy something is on the map

9. The maps that can show types of things that are grown, raised or mined in a certain place are called ……
A. population maps
B. physical maps
C. product maps

10. This map uses boundary lines to show the history of an area. It is a …….
A. historical map
B. road map
C. political map

11. The natural landscape features of Earth is shown on ……
A. physical maps
B. road maps
C. resource maps



Mapping

In spite the fact people use various types of maps, all of them have similar components. These common parts include a title, a legend or key, a direction indicator and a scale.

The title of a map. The title is important because it describes the theme or subject of a map, what it is about. Sometimes the title of the map may include a date. Dates are usually used to show features that have undergone changes over a period of time. A map with the title "Distribution of Population in Ukraine: 1917", for example, should not be used when looking for figures on the present population of Ukraine.

A legend. A legend or a key is a list of symbols that appear on the map. It explains the meaning of colors and symbols the map uses. If the user knows the meaning of colours on the map, what the green, red, and blue, for instance, represent, then the map won't be misunderstood and will be read properly. The stars used on the map stand for capital cities, so the legend also explains the meaning of symbols used on a map.

A direction indicator. Every map should have a direction indicator. A directional indicator lets the map user know which side of the map corresponds to north.

In some cases, the direction indicator on a map might be used only as a design element and doesn't perform any specific functional, because many maps are not intended to be used for actual navigation, but to provide a schematic of a place. A subway system map, for example, gives a general sense of which stations are near each other.

Map scales and projections.

Scale and projections are among essential features of maps. Scale refers to how map units relate to real-world units. The scale of the map indicates how much our planet has been reduced to be reproduced on this map.

In other words, scale is the relationship between the actual distance and the distance shown on the map.

Projections deal with the methods around turning a three-dimensional earth into a two-dimensional map.

It is impossible to show the earth's curved surface on a map without distortions. They are inevitable in the process of illustrating the earth's spherical surface on a flat map. Map projections introduce distortions in distance, angles, and areas.

Remote sensing

Rapid developments in technology have contributed much to the appearance of new tools. The aim of these tools is to provide a certain amount of valuable information about the earth's surface. Remote sensing ranks first among the most important new methods. It is defined as the gathering and recording of information by means of aerial photographs and satellite images.

Aerial photographs. Aerial photographs are the pictures taken from above the earth. They are of great help to examine relationships between people and places that cannot be easily seen from the ground level. To plan new highways, the aerial photographs of traffic patterns can be used. The aerial photographs are also of great help to foresters because they are able to spot diseased or insect-infested trees in some remote areas which are difficult to reach on foot. Even the features of the ocean floor can be observed using aerial photographs.

Aerial photographs are considered to be a reliable source of information, because it is accurate and detailed.

Most aerial photographs used for making maps are taken by

cameras in high-altitude airplanes.

Satellite images

Many of the satellites circling the earth have special sensors called multispectral scanners.

These scanners make records of observations electronically and send them to the ground stations. Computers then translate the data into electronic images. Despite the fact the pictures are taken from the far space, they are so accurate and detailed to such an extent that they can show houses or even sailboats on a lake.

Landsats is group of earth satellites. These satellites revolve around the earth 14 times every 24 hours. During this time, they scan, collect and send back a greater view of the entire world than any human being could ever see.

Besides various types of maps and remotely sensed images, geographers also use tables, charts and diagrams to help them in their work.