HISTORY 702
What is Geography?

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LIFEPAC Test is located in the center of the booklet. Please remove before starting the unit.
What is Geography?

Introduction

Geography is a science that deals with the ways in which man adapts to the conditions of the earth’s surface, both natural and man-made.

In this LIFEPAC® we shall study geography within the framework of the major regions of the earth. We shall learn about the shape, movement, climatic regions, and surface of the earth as a whole.

We shall learn that geography is a relationship between man and his environment. As man adjusts to his environment, he also modifies or changes it from a natural environment to a cultural environment. Cultural environment includes such man-developed features on the earth’s surface as cities, roads, railroads, canals, fields, cemeteries, dams, drainage ditches, and irrigation systems.

Objectives

Read these objectives. The objectives tell you what you will be able to do when you have successfully completed this LIFEPAC. When you have finished this LIFEPAC, you should be able to:

1. Identify the different classes of geography.
2. Describe the shape of the earth and give its dimensions.
3. Recognize the seasons and tell how they are determined.
4. Identify the major land forms and describe each one.
5. Recognize the different kinds of maps.
6. Read a map by using latitude and longitude.
7. Perform an experiment in geography.
Survey the LIFEPAC. Ask yourself some questions about this study and write your questions here.
1. GEOGRAPHY AND THE PLANET EARTH

Geography is the study of the earth's surface, climate, continents, countries, peoples, industries, and products. The term geography is derived from the Greek word geographia which means earth description. Geography is dependent upon geology, biology, chemistry, physics, mathematics, astronomy, and anthropology for much of its basic material and information.

The geography of the earth has a tremendous effect upon the lives of all men. To a very large degree, it determines the way we live. But what determines the geography of each area of the earth? Much of the earth's geography is determined by the planet itself and its relationship to the sun. In this section we shall study the different kinds of geography and the shape and the movement of the earth.

SECTION OBJECTIVES

Review these objectives. When you have completed this section, you should be able to:

1. Identify the different classes of geography.
2. Describe the shape of the earth and give its dimensions.
3. Recognize the seasons and tell how they are determined.

VOCABULARY

Study these words to enhance your learning success in this section.

anticyclone (anˈ tē sīˈ klō n). Winds moving around and away from the center of high pressure, which also moves.
axis (akˈ sis). A straight line around which an object turns.
cyclone (sīˈ klō n). A storm or winds moving along and spiraling toward a calm center of low pressure, which also moves.
elevation (elˈ u vāˈ shun). The height above sea level.
ionosphere (ī onˈ u sfir). The region of the atmosphere between the stratosphere and the exosphere.
perpendicular (pē rˈ pun dikˈ yu lur). Intersecting at or forming right angles.
rain forest (rā nˈ fōrˈ ist). A large, dense forest in an area of heavy rainfall.
savanna (sā vanˈ u). A grassy plain with few or no trees.
STATE HISTORY AND GEOGRAPHY PROJECT

This project is designed to help you learn more about your own state. Over the next few weeks, work through the following instructions. The items you are adding to your state booklet will give you the opportunity to apply the text material you are learning. Organize your booklet any way you would like. The divisions used here will help organize your time and coordinate your booklet with your studies.

Possible items that can be used for the booklet are a spiral notebook, a scrapbook, a three-ring binder, or a folder. All of the work can be done on a computer if you have word-processing and drawing software. This is not something that should be completed in one day. It may take some time to obtain the maps and resources you will need. Your booklet should tell a story about your state.

Maps:
1. Begin this booklet by drawing a map of the United States and putting your state on it in the color of your choice.
2. Write the natural landform in which your state is located.
3. Draw a large map of your state and mark the major natural features on it, such as lakes, mountains, rivers, desert. Label them.

Climate:
4. Write a few sentences describing the climate in your state.
5. Find out what the average monthly rainfall is in your state.
6. Draw a chart showing this annual rainfall.

General State information:
7. Find out and write down the following information: your state motto, your state bird, your state flower, your state tree.

History:
8. Write about a historical event in your state.
9. Write a few sentences describing which nation first explored and claimed the land that is now your state.
10. What year was your state admitted to the Union?

Additional Mapping:
11. Find and fill in on your state map the following things: capital city, largest city, your town or city.
12. Write down what large bodies of water your state is nearest.
13. Write down what time zone your state is in.
14. Make a chart showing the average monthly temperatures of your state.

Industry:
15. How long is the growing season in your state?
16. Find out and write down the following information: the major crops raised in your state, the major industries of your state and the local natural resources used in these industries.
17. Name and mark on your map an area that tourists visit in your state. Explain why tourists come to visit these areas in your state.

Other information:
18. Use an encyclopedia or books provided by your teacher to find more information about your state. Write it up for your booklet.
19. Make a cover for your booklet.
20. Hand in your booklet to your teacher.

SCORE 80/100

TEACHER

initials  date
steppe (step). A vast, treeless plain in southeastern Europe and in Asia.
stratosphere (strat’ u sfir). The region of atmosphere that extends from ten to twenty miles above the earth.
taiga (tī ’ gu). A coniferous evergreen forest just south of the Arctic zone.
topography (tu pog’ ru fě). The surface of an area or a detailed description or drawing of that area.
tropical jungle (trop’ u kul jung’ gul). A dense jungle, having a heavy rainfall.
troposphere (trō ’ pu sfir). The lowest region of the atmosphere that extends ten miles above the earth’s surface.
tundra (tun’ dru). A region mostly within the Arctic Circle with permanently frozen subsoil and vegetation for 3 months of the year.

Note: All vocabulary words in this LIFEPAC appear in boldface print the first time they are used. If you are not sure of the meaning when you are reading, study the definitions given.

Pronunciation Key: hat, āge, cāre, fār; let, ēqual, tērm; it, īce; hot, ōpen, ērd; oil; out; cup, pūt, rūle; child; long; thin; /TH/ for then; /zh/ for measure; /u/ or /a/ represents /a/ in about, /e/ in taken, /i/ in pencil, /o/ in lemon, and /u/ in circus.

**CLASSES OF GEOGRAPHY**

In your study of geography, you will discover the different kinds of geography. Geography is divided into the following classes: physical geography, meteorology, climatology, economic geography, urban geography, political geography, mathematical geography, cultural geography, and regional geography.

**Physical geography.** Physical geography is the study of the physical features of the earth and the influence that these features have on man. Physical geography includes almost everything from the earth as a planet through the major features of the earth’s crust. It also includes the changes that occur on the earth’s surface such as land erosion (weathering) and stream erosion. Physical geography includes the formation, description, and effect of the landforms of plains, plateaus, and mountains. It also includes the work of ice, rivers, oceans, atmosphere, as well as plant and animal distribution. You will study about landforms later in this section.

**Meteorology.** Meteorology is the study of the earth’s atmosphere. Meteorology was at one time considered a branch of geography; however, today it is considered a branch of physics. Meteorology deals with the various parts of the atmosphere: The troposphere, stratosphere, and ionosphere. Meteorology is also concerned with the methods and instruments used in recording the weather. In addition, it deals with the problems of condensation, evaporation, precipitation, temperature changes and their variations, wind systems, local winds, air masses, weather fronts, cyclones and anticyclones. Meteorology also includes weather analysis and forecasting. Thus, meteorology becomes very important in the study of geography in order to understand how our lives are affected by the changes in weather in different parts of the world.
Atmospheric Layers by Altitude

- **Troposphere**
  - Contains most of Earth's mass.
  - Temperature decreases with altitude.
  - Precipitation occurs.

- **Stratosphere**
  - Contains the ozone layer.
  - Temperature increases with altitude.
  - Commercial aircraft fly here.

- **Mesosphere**
  - Meteors enter Earth's atmosphere here.
  - Temperature decreases with altitude.

- **Thermosphere**
  - Temperature increases with altitude.
  - Auroral displays occur.
  - Helium layer: 1126–3540 km
  - Hydrogen layer: > 3540 km

- **Ozonosphere**
  - Contains O₃ molecules.

- **Stratosphere**
  - Contains O₃ molecules.

- **Temperature**
  - Range: -100°C to 0°C

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- **IONOSPHERE**
  - Contains weather balloons.
  - Contains meteors.

- **What is Geography?**
  - Unit 2
  - Section 1
Climatology. Climatology deals with the study of average weather, called climate. Climate is the summary of all the various weather influences and is one of the most influential factors of the physical environment. The importance of climate and its influence on man are better understood when the way of life of the desert dweller is compared with the customs and activities of people living in a humid, marine type of climate. The elements of climate are temperature, pressure, wind, and moisture.

The elements that control climate are altitude, the relationship between continents and oceans, pressure belts, wind belts, ocean currents, and topography.

Climatic regions are based on vegetation and include rain forests, tropical jungles, savannas, steppes, deserts, taigas, and tundras.
1.1 Use across and down clues to complete the crossword puzzle.

**ACROSS**
1. A grassy plain with few or no trees.
2. The height above sea level.
3. A large, dense forest in an area of heavy rainfall.
4. Dense jungle having a heavy rainfall. Found in the area between the Tropics of Cancer and Capricorn.

**DOWN**
1. A vast, treeless plain in southeastern Europe and in Asia.
2. A coniferous evergreen forest just south of the Arctic zone.
3. The surface of an area or a detailed description or drawing of that area.
4. A region mostly within the Arctic Circle with permanently frozen subsoil and vegetation for 3 months of the year.
Complete these activities.

1.2 Physical geography is the study of the a. __________________________ features of the earth and the influence that these features have on b. __________________________.

1.3 Two kinds of erosion that change landforms, and hence the earth’s surface, are a. __________________ erosion (weathering) and b. __________________________.

1.4 Physical geography includes the formation of the landforms mentioned above such as a. __________________________, b. __________________________, and c. __________________________.

1.5 What are three parts of the atmosphere?
   a. _____________________________________________________________________________________________
   b. _____________________________________________________________________________________________
   c. _____________________________________________________________________________________________

1.6 List nine problems with weather.
   a. _____________________________________________________________________________________________
   b. _____________________________________________________________________________________________
   c. _____________________________________________________________________________________________
   d. _____________________________________________________________________________________________
   e. _____________________________________________________________________________________________
   f. _____________________________________________________________________________________________
   g. _____________________________________________________________________________________________
   h. _____________________________________________________________________________________________
   i. _____________________________________________________________________________________________
Write the letter of the correct answer on the line (each answer, 2 points).

1.01 Which of the following does not control climate? ________
   a. altitude    b. agriculture    c. wind belts    d. ocean currents

1.02 The distance between the earth and the sun is about ________.
   a. 1 million miles   b. 62 million miles   c. 18 million miles   d. 93 million miles

1.03 The rotation of the earth around its own axis takes ________.
   a. 24 hours   b. 365 days   c. 12 hours   d. 1 hour

1.04 How many days does it take the earth to revolve around the sun? ________
   a. 365   b. 365½   c. 366   d. 365¼

1.05 The earth’s axis is not perpendicular but is tilted at ________.
   a. 10½°   b. 50°   c. 23½°   d. 15½°

1.06 The North Pole is farthest from the sun on ________.

1.07 The dates on which both poles are equally distant from the sun are ________.
   a. September 23 and March 21   b. June 21 and March 21
   c. December 21 and June 21   d. June 21 and September 23

1.08 In the Northern Hemisphere the longest day of the year is ________.

1.09 On June 21 the sun’s most direct rays strike the earth at the ________.
   a. North Pole   b. Arctic Circle   c. equator   d. Tropic of Cancer

1.10 In the Northern Hemisphere the shortest day of the year is ________.

1.11 How often does leap year occur? ________
   a. every year   b. every 8 years   c. every 4 years   d. every 2 years

Complete these sentences (each answer, 3 points).

1.12 Three parts of the atmosphere are the a. ____________________________,
   b. ____________________________, and c. ____________________________.

1.13 The elements of climate are a. ____________________________, b. ____________________________,
   c. ____________________________, and d. ____________________________.

1.14 The highest point above sea level is a. ____________________________ and the lowest point below sea
   level is the b. ____________________________.
1.015 The study of the earth's atmosphere is called ________________________________.

1.016 ____________________________ geography is the study of a society's activities, beliefs, institutions, and behavior patterns.

1.017 ____________________________ geography is the study of city growth and decline.

1.018 Two kinds of erosion that change landforms, and hence the earth's surface, are weathering, also called a. __________________________ erosion and b. __________________________ erosion.

1.019 A name for average weather is ___________________________.

1.020 The a. __________________________ Circle is 23½ degrees south of the North Pole while the b. __________________________ Circle is the same distance north of the South Pole.

Match these items (each answer, 2 points).

1.021 _____ Tropic of Cancer  a. equal night
1.022 _____ circumference around poles  b. equal day
1.023 _____ Tropic of Capricorn  c. 24,860 miles
1.024 _____ solstice  d. 23½° south of the equator
1.025 _____ equinox  e. 24,902 miles
1.026 _____ circumference around equator  f. 23½° north of the equator
g. 7,927 miles

Answer these questions (each answer, 5 points).

1.027 Why do the polar regions have six months of day and six months of night?
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________

1.028 What is the shape of the earth? ____________________________