



LIFE·PAC®

Science



Alpha Omega Publications®

SCIENCE 409: THE PLANET EARTH

CONTENTS

I. THE AIR (ATMOSPHERE)	4
Regions of the Atmosphere	4
Gases in the Atmosphere	6
II. THE WATER (HYDROSPHERE)	13
The Great Flood	14
Fresh Water	15
Water Cycle	17
Salt Water	19
III. THE LAND (LITHOSPHERE)	24
Layers of the Earth	25
Shape of the Earth	27
Earth's Land Formations	29
Earth's Forces	32
Earth's Rotation and Revolution	33

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THE PLANET EARTH

“In the beginning God created the heaven and the earth.” This verse, Genesis 1:1, is the very first one in the Bible. This verse tells us who made the earth. God spoke and His own words created our great planet Earth. Did you know that the word *earth* is named 980 times in the Bible? God’s Word says a lot about the earth. He made a perfect place for His people to live. The mountains, rivers, lakes, oceans, animal life, and plant life make Earth a wonderful place.

Some unbelieving people say that the earth and the life on it were not created by God. They think that some kind of natural accident happened. We know that if they would read the first page of the Bible, they would find out that God had a reason to create

the earth. It was not an accident. John 17:17 says, “...thy Word is truth.” Those who trust in God believe the Bible and agree with what it says about the earth’s creation.

In this LIFE PAC® you will learn about our planet Earth and its three parts: air (atmosphere), water (hydrosphere), and land (lithosphere). The earth is one of the nine planets in our solar system. You will learn about the atmosphere around the earth. You will study about the oceans and the land. You will learn more appreciation for the plentiful gifts of air, water, and land that God has given us. In this LIFE PAC you also will discover some exciting verses of the Bible that told man long ago about the earth.

OBJECTIVES

Read these objectives. The objectives tell you what you should be able to do when you have completed this LIFE PAC.

When you have finished the LIFE PAC, you should be able to:

1. List the three main parts of the earth: air, water, and land.
2. Tell that the planet Earth was created by God, as written in Genesis 1:1.
3. Tell that the air and the clouds are a part of the earth.
4. Name the percentage of water on the earth.
5. Tell the differences between fresh water and ocean water.
6. Name the three main layers of the lithosphere (crust, mantle, and core).

7. Explain that the earth is round like a ball.
8. List what God created each day on the earth.
9. Tell that we call our round earth a sphere.
10. Explain the meaning of gravity.
11. Tell the difference between a fault and an earthquake.

VOCABULARY

Study these new words. Learning the meanings of these words is a good study habit and will improve your understanding of this LIFEPAK.

atmosphere (at' mu sfir). The air and other gases that surround the earth.

basalt (bu sôlt'). A hard, dark-colored rock.

chemist (kem' ist). A person who is expert in chemistry.

climate (kli' mit). The kind of weather a place has over a long period of time.

condense (kun dens'). Change from a vapor or gas to a liquid.

current (ker' unt). Flow of water, air, or any liquid in a certain direction.

eclipse (i klips'). A complete or partial blocking of light passing from one heavenly body to another. For example, an eclipse of the sun occurs when the moon is between the earth and the sun, it cuts off all or part of the sun's light.

element (el' u munt). One of the 103 known substances that cannot be separated into simpler parts.

evaporate (i vap' u rât'). Change from a liquid into gas or vapor.

fault (fôlt). A break in the crust of the earth.

flood (flud). Fill to overflowing.

granite (gran' it). A hard, fire-made rock.

gravity (grav' u te). The natural force that causes objects to move or tend to move toward the center of the earth.

horizon (hu rî' zun). The line where the earth and sky seem to meet.

horizontal (hôr' u zon' tul). Parallel to the horizon.

hydrosphere (hî' dru sfir). The water part of the earth.

ionosphere (î on' u sfir). A region of the atmosphere above the stratosphere extending from about 50 miles into space to 300 to 600 miles into space.

lithosphere (lith' us sfir). The solid, or land, part of the earth.

moisture (mois' chur). Wetness.

nitrogen (nī' tru jun). A colorless, odorless, tasteless gas (element) that forms about four-fifths of the atmosphere.

oxygen (ok' su jun). A colorless, odorless, tasteless gas (element) that forms about one-fifth of the atmosphere.

particle (pär' tu kul). A very little bit of something.

plain (plān). A flat stretch of land less than 2,000 feet above sea level.

plateau (pla tō'). A large, flat stretch of land over 2,000 feet above sea level.

precipitation (pri sip' u tā' shun). The depositing of moisture in the form of rain, dew, or snow.

revolve (ri volv'). To move in a circle around a point.

rotate (rō' tāt). To move around a center, or axis.

soil (soil). The ground, earth, dirt, or land.

sphere (sfir). A round, solid figure.

stratosphere (strat' u sfir). The region of the atmosphere above the troposphere, from 10 to 30 miles up into space.

tilt (tilt). To tip, slope, or slant.

troposphere (trō' pu sfir). The lowest region of the atmosphere extending about ten miles into space.

water vapor (wôt' ur vā' pur). Water that has changed into a gas.

Note: All vocabulary words in this LIFE PAC appear in **boldface** print the first time they are used. If you are unsure of the meaning when you are reading, study the definitions given.

Pronunciation Key: hat, āge, cāre, fär; let, ēqual, tērm; it, īce; hot, ōpen, ôrder; oil; out; cup, pūt, rüle; child; long; thin; /Th/ for then; /zh/ for measure; /u/ represents /a/ in about, /e/ in taken, /o/ in lemon, and /u/ in circus.

I. THE AIR (ATMOSPHERE)

Have you ever flown in an airplane? Did you know you were flying through part of the earth? You weren't flying through the solid part of the earth, but through the air. All of the air is really a part of the earth. This part of the earth is called the **atmosphere**.

The planet Earth is divided into three parts. First is the atmosphere,

which is made up of the air and other gases. Second is the **hydrosphere**, which includes all of the bodies of water on the Earth. The third part is the **lithosphere**. The lithosphere includes all of the land on the Earth. In this section you will learn about the part of the Earth called the atmosphere.

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

1. List the three main parts of the earth: air, water, and land.
2. Tell that the planet Earth was created by God, as written in Genesis 1:1.
3. Tell that the air and the clouds are a part of the earth.

Restudy these words.

atmosphere	hydrosphere	particle
chemist	ionosphere	stratosphere
condense	lithosphere	troposphere
element	nitrogen	water vapor
evaporate	oxygen	

REGIONS OF THE ATMOSPHERE

When you stand on the ground, everything above you that is not solid is the air, or **atmosphere**. The earth's atmosphere extends about 1,000 miles into space. In this section you will learn about the different levels or regions of the atmosphere.

Troposphere. The lowest region of the atmosphere is called the **troposphere**. It extends about ten miles into space. All weather changes occur in this region. Conditions in the troposphere cause our temperature changes, clouds, snow, rain, and storms.