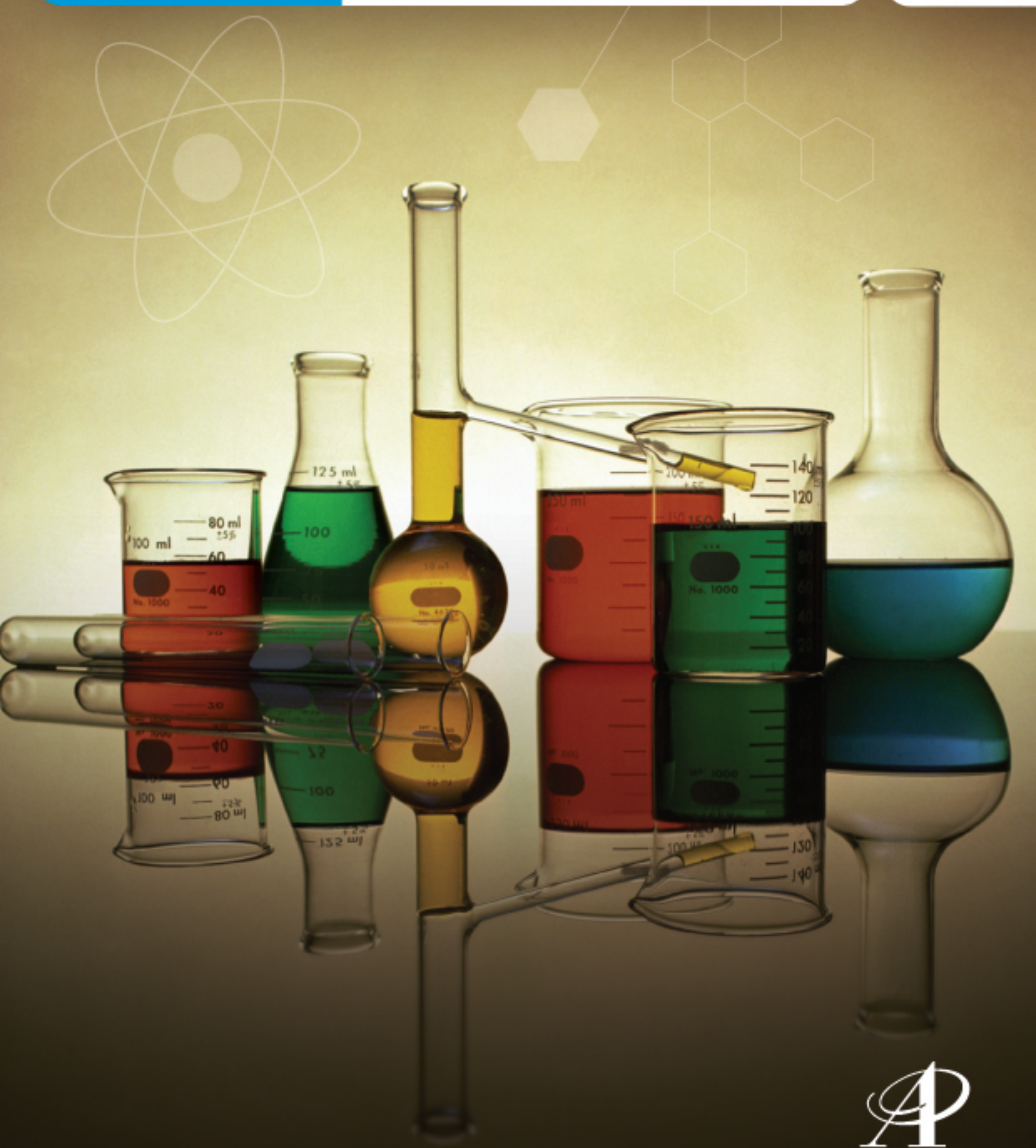




LIFE·PAC[®]

Science



Alpha Omega Publications[®]

SCIENCE 410

UNDERSTANDING GOD'S WONDERFUL CREATION

CONTENTS

I. GOD'S WONDERFUL CREATION	3
Solar System	4
Earth	8
II. GOD'S CHANGING WORLD	16
Matter	17
Water	19
Weather	22
III. MAN'S CREATIVE ABILITY	28
Using Nature's Energy	29
Using Nature's Materials	37
IV. MAN'S CHANGING ENVIRONMENT	44
Ecology	45
Communities	46
Conservation	48

Author:
Editor-in-Chief
Editor:
Consulting Editor:
Revision Editor:

Merton B. Osborn, Ed.D.
Richard W. Wheeler, M.A.Ed.
Joyce R. Davis
Harold Wengert, Ed.D.
Alan Christopherson, M.S.



Alpha Omega Publications®

804 N. 2nd Ave. E., Rock Rapids, IA 51246-1759

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UNDERSTANDING GOD'S WONDERFUL CREATION

The nine Science LIFEPAcs that you have already completed in this series have helped you understand more about God's great creation.

The distant stars, the sun, the moon, and the billions of galaxies in space all point to a God of order. The earth, speeding around the sun, travels in an exact orbit. In this LIFEPAc® you will review the solar system, plants, and animals. Matter, water, and weather will also be discussed.

A review of man's discoveries will be included. You will recall how man has used gravity, electricity, and magnetism to help him in his work. Man has also made simple and complex machines to speed up his work and make it easier.

Man is beginning to recognize that he has been selfish and careless with the resources God has placed upon the earth. A review of ecology, communities, and conservation will help you to better understand these problems.

OBJECTIVES

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

When you have finished this LIFEPAc, you should be able to do the following:

1. Tell who created the universe.
2. List the planets in their order from the sun.
3. Explain the difference between astronomy and astrology.
4. Name the three forms of matter and give an example of each.
5. Describe matter, molecules, and atoms.
6. Tell what an element is.
7. Recognize four causes of weather.
8. Identify five instruments used in predicting weather.
9. Tell who discovered the laws of gravity and how gravity affects things on the earth and moon.

10. Explain how objects, atoms, electrons, and electricity relate to each other.
11. Tell about magnets, magnetic materials, and electromagnets.
12. Identify five scientists and tell what they were famous for.
13. Name and give examples of six simple and several complex machines.
14. Tell about communities of living things and how the living things depend upon each other.
15. Tell ways that resources can be conserved and preserved.

VOCABULARY

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

asteroid (as' tu roid). Any of the very small planets revolving around the sun.

astrology (u strol' u jē). A false science that claims to tell a person's future by studying the heavenly bodies.

atom (at' um). A tiny building block of matter which joins other atoms to make molecules.

chemistry (kem' u strē). A science that deals with matter.

circuit (ser' kit). The track on which electric current flows.

conductor (kun duk' tur) Any material through which electricity will flow.

diameter (dī am' u tur). A line through the center of a circle and from side to side.

ecology (ē kol' u jē). The science that deals with the relation of living things to their environment and each other.

electron (i lek' tron). A particle in an atom that can travel out of the atom.

environment (en vī' run munt). All the surroundings, conditions, and influences that have to do with the growth of things.

extinct (ek stingkt'). No longer living.

generator (jen' u rā tur). A large machine that makes electricity.

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

habitat (hab' u tat). A place where an animal or plant naturally lives and grows.

inclined plane (in klīnd' plān). A sloping, flat surface.

insoluble (in sol' yu bul). A material that cannot be dissolved.

insulator (in' su lāt' tur). Any material through which electricity cannot flow.

invertebrate (in vē'r' tu brit). An animal without a backbone.

meteoroid (mē' tē u roid). An object in space which becomes a meteor when it enters the earth's atmosphere.

molecule (mol' u kyül). The smallest particle into which a material can be divided without change.

photosynthesis (fō tu sin' thu sis). The process in a plant that changes light into food.

pollution (pu lü' shun). Making dirty or impure.

proton (prō' ton). A particle of an atom that does not travel out of the atom.

radiation (rā dē ā' shun). Giving out rays of light, heat, or electricity.

soluble (sol' yu bul). A material that can be dissolved in another material.

suspension (su spen' shun). A condition that happens when one material will not dissolve in another.

troposphere (trō' pu sfir). The layer of atmosphere nearest the earth.

vertebrate (vē'r' tu brit). An animal that has a backbone.

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, fār; let, ēqual, tērm; it, īce; hot, ōpen, ōrder; oil; out; cup, pūt, rüle; child; long; thin; /TH/ for then; /zh/ for measure; /u/ represents /a/ in about, /e/ in taken, /i/ in pencil, /o/ in lemon, and /u/ in circus.

I. GOD'S WONDERFUL CREATION

Do you remember how far the earth is from the sun? The earth is just the right distance—about 93 million miles (150 million kilometers). If this distance were much greater, all life on earth would freeze. If it were less, the

world would burn up. God's plan for His creation is perfect. In this part of your LIFE PAC, you will review and study about the solar system, including the earth.

You will recall the parts of a plant and their functions. You will also review how a loving God has provided

for plants and animals in order that they may serve us and help keep us alive.

SECTION OBJECTIVES

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

1. Tell who created the universe.
2. List the planets in their order from the sun.
3. Explain the difference between astronomy and astrology.
14. Tell about communities of living things and how the living things depend upon each other.

Restudy these words.

asteroid
astrology
extinct

gravity
habitat
invertebrate

meteoroid
photosynthesis
vertebrate

SOLAR SYSTEM

Before plants, animals, or man was placed upon the earth, God had spoken the sun and moon into existence. The sun, earth, moon, planets, and smaller objects called **meteoroids**, comets, and **asteroids**, make up what we call the solar system. He had made the stars, also.

Origin. On the fourth day of Creation God said (Genesis 1:14), "Let there be lights in the firmament of the heaven to divide the day from the night." The Bible account tells us that the lights were to be "...the greater

light to rule the day." On the fourth day, God also created the moon. God called it "...the lesser light to rule the night." The Bible tells us that God also made the stars.

Sun. Our sun is a star. It is the center of our solar system. The earth, moon, planets, and smaller heavenly bodies revolve around the sun. Without the sun, life on this planet earth would be impossible. Without the sun there could be no weather. The tilt of the earth causes our seasons. The heat from the sun moves