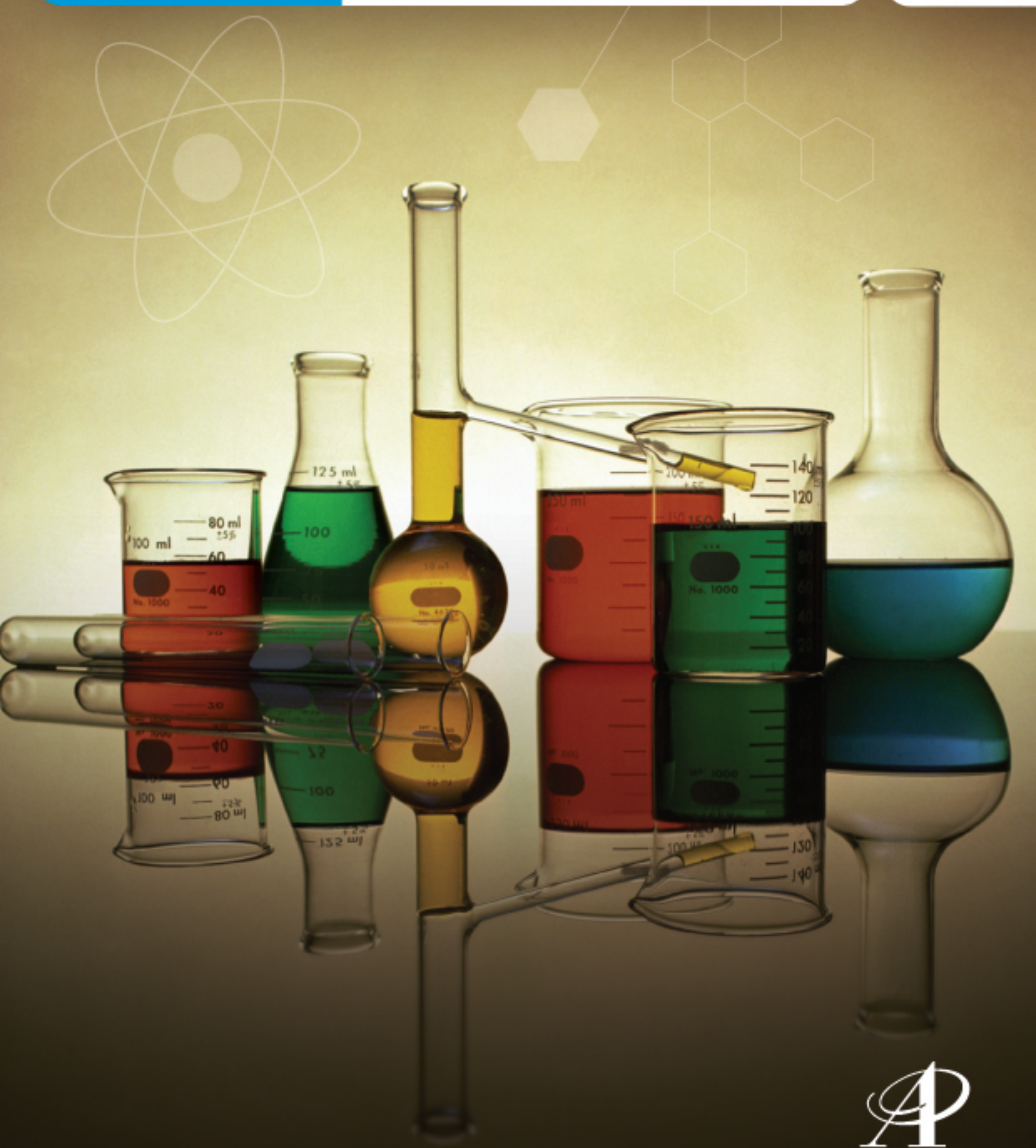




LIFE·PAC<sup>®</sup>

Science



Alpha Omega Publications<sup>®</sup>

# SCIENCE 401: PLANTS

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**Author:**

Editor:

Consulting Editor:

Revision Editor:

**Merton B. Osborn, Ed.D.**

Richard W. Wheeler, M.A.Ed.

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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# plants

In this LIFEPAC® you will learn more about God's world for us to enjoy. You will learn more about God's world. You will be about plant life and the parts of better able to see and tell about plants. You will learn to **appreciate** God's design in nature and know God's wonderful creation. that God has created a beautiful

## 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 completed this LIFEPAC, you will be able to:

1. Tell why plants are living things.
2. Explain how some plants are used.
3. Tell about the different parts of a plant.
4. Explain how the different parts of the plant work together.

## VOCABULARY

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

**appreciate** (u prē' shē āt). To be thankful. To know the value of something.

**asparagus** (u spar' u gus). A plant of the lily family.

**beet** (bēt). The root of a plant, usually eaten as a vegetable.

**carbon dioxide** (kār' bun dī ok' sīd). A heavy gas (without color or smell) which is in the air.

**celery** (sel' u rē). A vegetable with a long stalk.

**chlorophyll** (klôr´ u fill). The green-coloring matter in plants.

**citrus** (sit´ rus). Fruit such as oranges or lemons.

**container** (kun tã´ nur). A box or jar or anything to hold another thing.

**created** (krē āt´ id). Made.

**cucumber** (kyü´ kum bur). A fruit with a green skin, used in salads and for pickles.

**decay** (di kã´). To become rotten.

**diagram** (dĩ´ u gram). A drawing showing the main parts.

**floral** (flôr´ ul). Having to do with flowers.

**geranium** (ju rã´ nē um). A plant with pretty flowers often grown as a window plant.

**grapefruit** (grãp´ früt). A yellow, round citrus fruit larger than an orange.

**herb** (êrb). A plant whose stems or leaves are used in cooking.

**lettuce** (let´ is). The green leaves of a plant used in salads.

**ovary** (ō´ vur ē). The part of a plant that holds the seeds.

**parsnip** (pär´ snip). A vegetable with a long, white root like a carrot.

**pepo** (pē´ pō). A fleshy fruit with a hard rind and many seeds, such as a melon or cucumber.

**petal** (pet´ l). One of the parts of a flower that is usually colored.

**pistil** (pis´ tl). The part of a flower that makes the seeds.

**pollen** (pol´ un). A yellow powder in flowers.

**pollinate** (pol´ u nat). To carry pollen from stamens to pistils.

**pome** (pōm). Fruit such as pears, apples, or quince.

**quince** (kwins). A hard, yellow sour fruit.

**radish** (rad´ ish). A small root with red or white skin.

**receptacle** (ri sep´ tu kl). The stalk of a plant that holds up the petals, stamens, and pistils.

**reproduce** (rē pru dūs´). To make again.

**sac** (sak). A part of a flower.

**sepal** (sē´ pul) The outer cover of a flower.

**spinach** (spin´ ich). A plant with green leaves which are boiled and eaten.

**stamen** (stã´ mun). The part of a flower that contains the pollen.

**stigma** (stig´ mu). Top part of the pistil of a flower.

**storehouse** (stôr´ hous). A place where things are kept.

**style** (stīl). The stemlike part of the pistil of a flower.

**turnip** (tēr´ nup). A plant with large roots used as a vegetable.

**universe** (yü´ nu vèrs). Everything there is.

**vitamins** (vī´ tu munz). Substances in food that are needed for growth.

**yam** (yam). Root of a vine used for food. A sweet potato.

**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, /o/ in lemon, and /u/ in circus.

## I. PLANT LIFE

In this part of your LIFE PAC you will learn about living plants: why plants are living and how plants are used.

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

1. Tell why plants are living.
2. Explain how some plants are used.

### Restudy these words.

appreciate	grapefruit	pome	storehouse
asparagus	herb	quince	turnip
beet	lettuce	radish	universe
citrus	parsnip	reproduce	vitamins
created	pepo	spinach	yam

## WHY PLANTS ARE LIVING THINGS

Plants were created by God as living things. God made them and gave them life. God made things that have life go through stages of growth. Plants have life from God, and they grow. God has also provided everything plants need in order to grow.



## Growing Plants is Fun.

**Plants have life.** Did you ever have a garden and watch a tiny sprout stick its head up through the soil? Or perhaps you have watched a plant poke its stem and leaf up through the soil in a flowerpot near a window. Did you understand why the little plant came up? Isn't it exciting to know that a mysterious law of life, created by God, was at work before your very eyes? We know that life is one of the great mysteries of the **universe**, and we can usually recognize whether a thing is living or not. For instance, you know that a dog is a living thing and that a rock does not have life. You know that living things grow, **reproduce** themselves, and need food, air, and water to live. They are also different from nonliving things

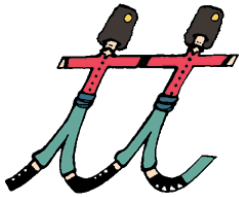
in the way the matter that makes them up is put together.

**Plants grow.** When you came to school this morning, did you see any plants? I hope you did. Plants grow almost everywhere in the world around us—even beside city streets. Many different kinds grow in all sizes and shapes. Some plants, such as violets, may be very small. Others, such as trees, are sometimes very large. You already know that living things need air, light, water, and food to live and grow. God gave us everything we need to grow. He gave plants and animals everything they need to grow, too.

You also know that God **created** nonliving objects such as rocks, sky, stars, moon, and sun.

The following exercise contains some words that name living things. The list also has some words that name nonliving things.

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**Put the right letters after each word.** For each word that names a living thing, write the letter L in the blank space. For each word that names a nonliving thing, place the letters NL in the blank.

- |      |            |       |
|------|------------|-------|
| 1.1  | stone      | _____ |
| 1.2  | sand       | _____ |
| 1.3  | tree       | _____ |
| 1.4  | baby       | _____ |
| 1.5  | auto       | _____ |
| 1.6  | canoe      | _____ |
| 1.7  | factory    | _____ |
| 1.8  | apple tree | _____ |
| 1.9  | water      | _____ |
| 1.10 | insect     | _____ |
- 

As you think about this list you will remember that all living things breathe air and need water, food, and light. You know, too, that such nonliving things as sand, stones, and water are part of the earth. Other things, such as automobiles and canoes, are man-made objects.

When God made the earth, He created both living and nonliving things. We can read about them in His Word, the Bible. In the very first book of the Bible (Genesis 1:11), we read about plants. God said, "Let the earth bring forth grass [plants],

the **herb** yielding seed [plants with seeds], and the fruit tree yielding fruit...upon the earth: and it was so." In the last book of the Bible (Revelation 4:11), we are told that God created *all* things: "Thou art [are] worthy, O Lord, to receive glory and honour and power: for thou hast created all things, and for thy pleasure they are and were created." How great God is to plan and create all things that we need to stay alive and to enjoy the living and nonliving things around us.