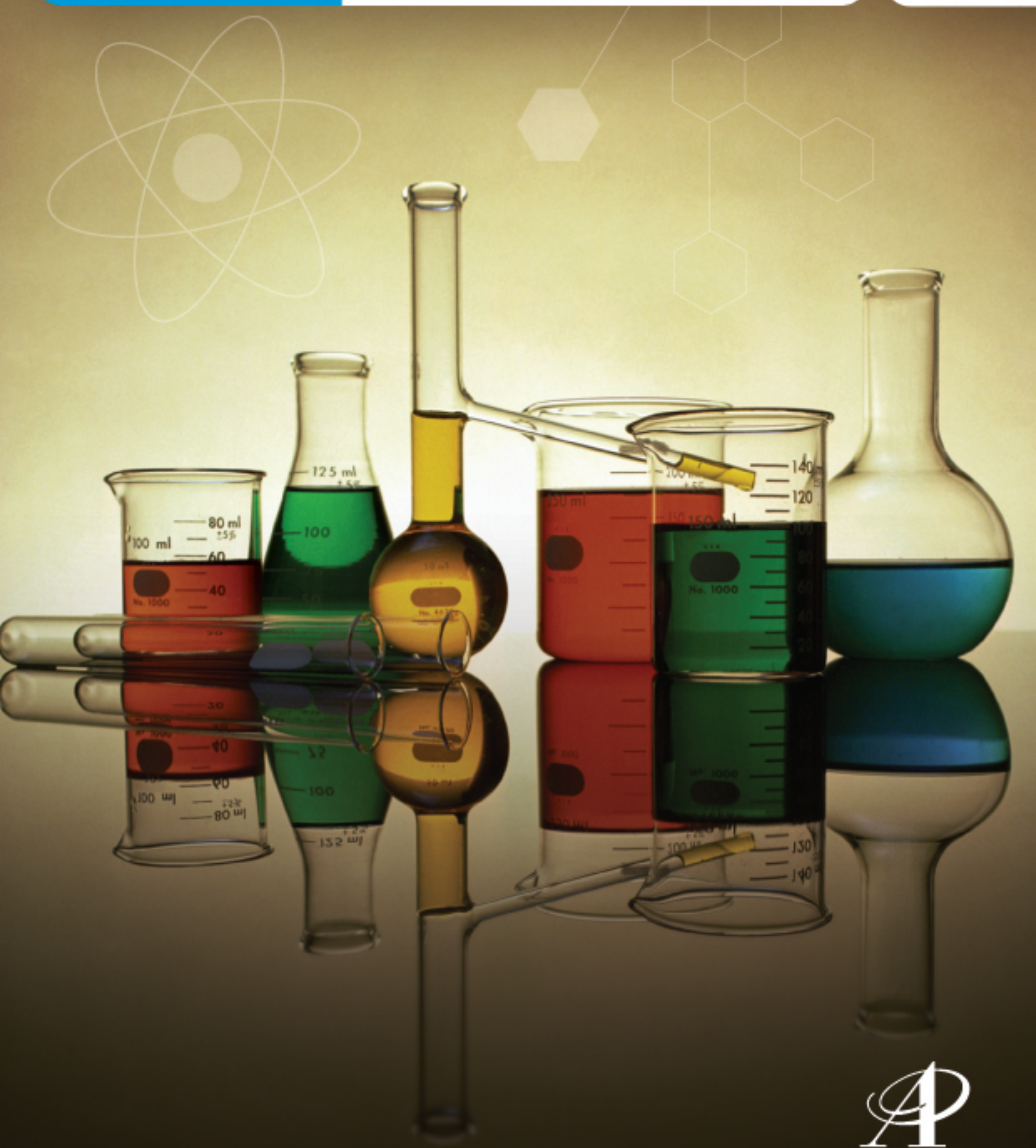




LIFE·PAC<sup>®</sup>

Science



Alpha Omega Publications<sup>®</sup>

# SCIENCE 303

## CHANGES IN ANIMALS AND ENVIRONMENTS

### NEW EDITION

A Teacher's Guide pull-out supplement is positioned in the center of this unit.

#### CONTENTS

<b>I. WHAT CHANGES AN ENVIRONMENT?</b> .....	<b>5</b>
<b>Temperature</b> .....	<b>8</b>
<b>Water</b> .....	<b>14</b>
<b>Light</b> .....	<b>21</b>
<b>Soil</b> .....	<b>25</b>
<b>II. HOW ARE ANIMALS DIFFERENT?</b> .....	<b>30</b>
<b>Structure</b> .....	<b>34</b>
<b>Kinds of Food</b> .....	<b>48</b>
<b>Respiration</b> .....	<b>51</b>
<b>III. HOW DO ANIMALS GROW AND CHANGE?</b> .....	<b>57</b>
<b>Invertebrates</b> .....	<b>58</b>
<b>Amphibians</b> .....	<b>65</b>
<b>Mammals</b> .....	<b>68</b>

**Author:** Barry Burrus, M.Div., M.A., B.S.

**Editors:** Alan L. Christopherson, M.S.

Tricia Haley, B.A.



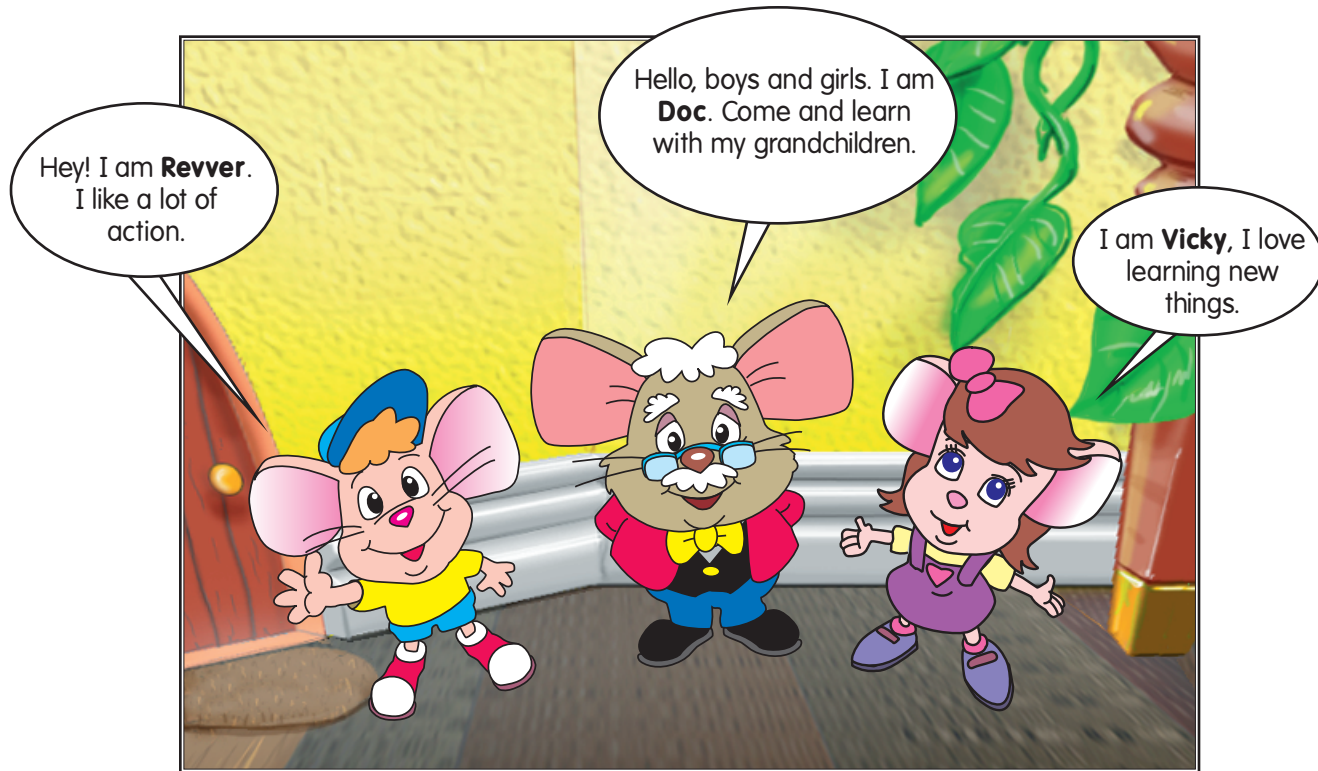
Alpha Omega Publications®

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

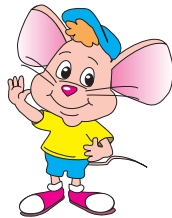
© MMVII by Alpha Omega Publications, Inc. All rights reserved. LIFE PAC, Doc Dickory, Dewey Decimole, Revver, Rikki, and Vicky Dickory are registered trademarks or trademarks of Alpha Omega Publications, Inc. pending registration in the United States Patent and Trademark Office. All rights reserved.

All trademarks and/or service marks referenced in this material are the property of their respective owners. Alpha Omega Publications, Inc. makes no claim of ownership to any trademarks and/or service marks other than their own and their affiliates', and makes no claim of affiliation to any companies whose trademarks may be listed in this material, other than their own.

## Learn with our friends:



When you see me, I will help your teacher explain the exciting things you are expected to do.



When you do actions with me, you will learn how to write, draw, match words, read, and much more.



You and I will learn about matching words, listening, drawing, and other fun things in your lessons.

# CHANGES IN ANIMALS AND ENVIRONMENTS

God created all of the **environments** on the earth. An environment is something that surrounds a living thing. For example, you live in a place that has land. The land around you is part of your environment. You also have air around you. The air is part of your environment, too. Perhaps you live near some water. The water would also be part of your environment. If you move to another part of the earth, your environment would change. The land, air, and water would be different in some ways.



**An environment—like the land, air, and water—surrounds a living thing**

In this LIFE PAC<sup>®</sup> you will learn about four things that cause an environment to change. These four things are **temperature**, water, light, and soil. Environments are different throughout the earth because these four things change.

God also created many animals to live in the air, water, and land environments. Temperature, water, light, and soil must be just right if living things are to live, grow, and multiply in an environment. An animal is made in a special way to survive in its normal environment. God made many different kinds of animals for the many different environments of the earth.

Animals are different and alike in many ways. Three of the ways that animals are different or alike are (1) how they are made, (2) what they eat and how they get their food, and (3) how they **breathe**. You will learn more about the ways that animals are different and alike. These differences allow scientists to arrange animals by groups or classes. You will learn more about different animals and their groups.

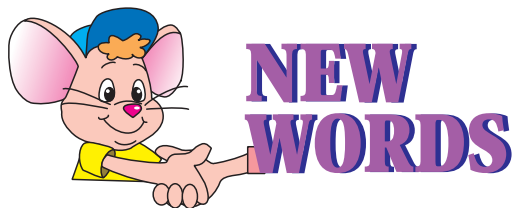
Finally, in this LIFE PAC you will learn some of the ways that animals grow and change. You will see that God's plan for all the animals and environments on the earth is orderly and good.



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

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

1. Tell what changes the environment in which animals grow.
2. Tell some ways in which animals are different.
3. Put some animals in groups or classes.
4. Describe changes in some of the animals that God has created.



**abdomen** (ăb' də mən). The last part of the three parts of an insect's body.

**adapt** (ə dəpt'). To become suitable for an environment.

**adult** (ə' dult'). A full-grown animal or plant.

**amphibian** (ăm fĭb' ē ən). Animals such as frogs, toads, and salamanders.

**antenna** (ăn tĕn' ə). A long feeler on the head of an insect.

**aquarium** (ə kwâr' ē əm). A tank for living fish.

**breathe** (brēTH). To inhale and exhale.

**Celsius** (sĕl' sē əs). A scale of temperature.

**classification** (klăs' ə fĭ kâ' sh ən). The placing of plants or animals into groups according to their likenesses.

**cold-blooded** (kōld' blūd' ǐd). Animals whose body heat changes with the temperature of their environment.

**design** (dǐ zīn'). Pattern.

**energy** (ēn' ər jē). The ability to do work. An example is heat energy. Heat energy can change the temperatures of things.

**environment** (ēn vī' rən mənt). The things around something.

**evaporate** (ǐ vāp' ə rāt). When a liquid, such as water, turns to vapor in the air.

**expand** (ēk spānd'). To become larger and take up more space.

**Fahrenheit** (fār' ən hīt). A scale of temperature.

**gills** (gǐlz). A body organ that some animals use to get oxygen in water.

**invertebrates** (ǐn vûr' tə brīts). Animals with no backbone.

**larva** (lār' və) or plural **larvae** (lar' vē). An early form of (an) insect(s).

**lungs** (lūngz). Organs used for breathing.

**mammals** (mām' əlz). Animals who have hair or fur, give birth, and make milk for their young.

**metamorphosis** (mēt' tə mōr' fə sīs). A complete change in form, especially in some animals.

**microscope** (mī' krə skōp). An instrument that makes small things look large.

**moderate** (mōd' ər ǐt). Between hot and cold.

**moisture** (mois' chər). Liquid water.

**molt** (mōlt). To shed, as some animals do in their skin or fur.

**multiply** (mūl' tə plī). To increase.

**observe** (əb zûrv'). To look, see, and learn.

**pattern** (pāt' ərn). A design.

**pupa** (pyōō' pə) or plural **pupae** (pyōō' pē). An insect that is changing from a larva(e) to an adult.