

Calvert 3rd Grade Science is a well-rounded course covering concepts across all areas of science. Presented in ten colorful units, this course captivates students with lessons on plants, animals, physical properties, the environment, and more.



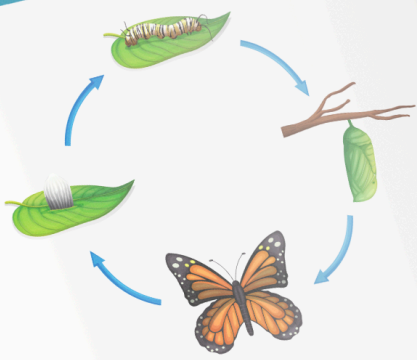
**Time Zones**

Time zones make it easier to tell what time it is on every part of the earth. The earth is divided into twenty-four time zones. Each zone covers a part of the earth's surface. Each time zone is equal to one hour. All of the clocks within one of the time zones are set to the same time. These worldwide time zones were established in 1884. The map of the world shows approximately how the world's surface is divided into twenty-four time zones. Most of the United States lies within four different time zones. These four time zones are Eastern, Central, Mountain, and Pacific. The map on the next page shows the location of these four time zones in the United States.



28 | Section 2

**Butterfly metamorphosis**



The third stage in the life of a butterfly is when the larva goes into a resting stage called the **pupa**. In the pupa stage, the animal will no longer look like a worm. The final thing that a larva does is to attach itself on a twig. There the animal will remain for some time not moving or eating. This is the pupa stage. A new covering forms on the outside of the hanging animal. The animal inside is changing. When everything is just right, an adult butterfly will come from the pupa skin. The adult stage is the fourth stage of a butterfly's life. The adult butterfly will lay eggs and the cycle will start over again. The animal must be strong in all of the four stages of metamorphosis. Every time you see a butterfly, moth, or even a housefly, think about these stages of change. The animal that you will be looking at had to survive these stages.

50 | Section 3

- 3.1** Fill in the blanks.  
 List the four stages of metamorphosis of a butterfly.  
 a. \_\_\_\_\_ b. \_\_\_\_\_  
 c. \_\_\_\_\_ d. \_\_\_\_\_
- 3.2** The skin of a larva cannot grow and must shed.  
 Arrange these stages into the proper order.
- |       |       |     |
|-------|-------|-----|
| adult | larva | egg |
|-------|-------|-----|
1. \_\_\_\_\_  
 3. \_\_\_\_\_

The adult female of a butterfly is able to lay eggs. Some time after the adult male butterfly adds substance to the eggs, the eggs will hatch into larvae. The larvae will change to the pupa stage. The pupae will become adults or females. The adults will become parents. The cycle continues.

# Scope & Sequence

Unit 1	<p><b>YOU GROW AND CHANGE</b></p> <ul style="list-style-type: none"> <li>• Air we breathe</li> <li>• Food for the body</li> <li>• Exercise and rest</li> <li>• You are different</li> </ul>	Unit 6	<p><b>SOUNDS AND YOU</b></p> <ul style="list-style-type: none"> <li>• Making sounds</li> <li>• Different sounds</li> <li>• How sounds move</li> <li>• How sounds are heard</li> </ul>
Unit 2	<p><b>PLANTS</b></p> <ul style="list-style-type: none"> <li>• Plant parts</li> <li>• Plant growth</li> <li>• Seeds and bulbs</li> <li>• Stems and roots</li> </ul>	Unit 7	<p><b>TIMES AND SEASONS</b></p> <ul style="list-style-type: none"> <li>• The earth rotates</li> <li>• The earth revolves</li> <li>• Time changes</li> <li>• Seasons change</li> </ul>
Unit 3	<p><b>ANIMAL AND ENVIRONMENT CHANGES</b></p> <ul style="list-style-type: none"> <li>• What changes an environment</li> <li>• How animals are different</li> <li>• How animals grow</li> <li>• How animals change</li> </ul>	Unit 8	<p><b>ROCKS AND THEIR CHANGES</b></p> <ul style="list-style-type: none"> <li>• Forming rocks</li> <li>• Changing rocks</li> <li>• Rocks for buildings</li> <li>• Rock collecting</li> </ul>
Unit 4	<p><b>YOU ARE WHAT YOU EAT</b></p> <ul style="list-style-type: none"> <li>• Food helps your body</li> <li>• Junk foods</li> <li>• Food groups</li> <li>• Good health habits</li> </ul>	Unit 9	<p><b>HEAT ENERGY</b></p> <ul style="list-style-type: none"> <li>• Sources of heat</li> <li>• Heat energy</li> <li>• Moving heat</li> <li>• Benefits and problems of heat</li> </ul>
Unit 5	<p><b>PROPERTIES OF MATTER</b></p> <ul style="list-style-type: none"> <li>• Robert Boyle</li> <li>• States of matter</li> <li>• Physical changes</li> <li>• Chemical changes</li> </ul>	Unit 10	<p><b>PHYSICAL CHANGES</b></p> <ul style="list-style-type: none"> <li>• Change in man</li> <li>• Change in plants</li> <li>• Matter and time</li> <li>• Sound and energy</li> </ul>

