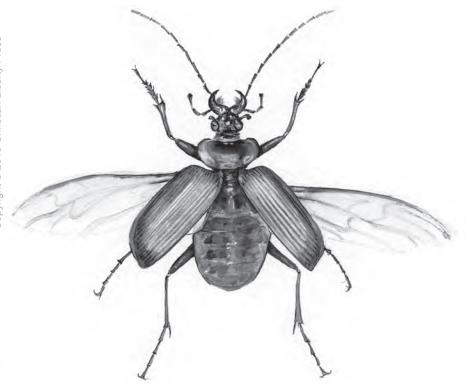
Christian Liberty Nature Reader Book 3

Third Edition



ANSWER KEY

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Introduction

The *Christian Liberty Nature Reader* series is an engaging set of readers that will spark your child's interest in God's world. This series can also be used for teaching science in the lower grades. To help instructors grade their students' daily work, answers have been provided to the Review questions found at the end of each story in the book. These questions are essentially objective in nature and are based on the information in the respective chapters.

Students should be expected to provide the same information, though not necessarily the same wording, when answering these questions. Also, the Review questions and the answers in this key can be used to foster discussions or group learning experiences.

May God grant you wisdom as you seek to introduce the wonder and order of His creation to your students. Learn to look for the amazing things around you, and thank God for all you have.

The Staff of Christian Liberty Press Arlington Heights, Illinois

Text Key

Unit 1: All About Ants

A Look at an Ant (page 4)

- 1. The hook-wing insects belong to the Hymenoptera order.
- 2. Most insects have six legs, four wings, and two feelers.
- 3. The three parts of the ant's body are the head, thorax, and abdomen.
- 4. The hook-wing order is divided into one kind that carries a little "saw" and the other kind that carries a "sword."
- 5. The abdomen of an ant's body has six rings.

The Life of an Ant (page 9)

- 1. The three types of ants in an anthill are the queens, drones, and worker ants.
- 2. Queen ants are different from the queen bee because there can be several queen ants in an anthill, but only one queen bee in a hive. Also, the queen bee rules her hive, but there is no ruler in an anthill.
- 3. Nurse workers care for the ant larvae by washing them (or *licking them*), preparing food and feeding them, keeping them warm and dry, and taking them into the air and sunshine. The nurses also stroke and smooth the larvae.
- 4. When the ant larvae are full grown, they spin <u>cocoons</u> (or fine nets, or cases), in which they change into adult ants.

The Ant's Home (page 13)

1. The queen ant begins to build her nest or anthill by taking off her wings; with her front feet, digging up the soil and tossing it back between her hind legs; and making a hallway. She uses the back part of her body to press and push the earth into firm balls and carries them out and lays them by the door. When the hall is two or three inches long, she makes a room for her babies.

- 2. The queen ant and her helpers make more halls and more rooms by standing on their back legs and biting the earth off, as they reach up their heads. Sometimes, they lie on their sides to clean off or smooth the side wall.
- 3. Some ants seem to make a kind of glue, or <u>varnish</u>, with which they line their walls.
- 4. Proverbs 6:6–8 commands us to learn from the ant to not be lazy.

The Ants at Home (page 18)

- 1. The worker ants keep the queens from leaving by taking their wings off and throwing them away. If the queens try to walk off, the worker ants will pick them up and carry them back.
- 2. In cold, wet weather the ants stay at home. If it starts to rain when they are out, the ants hurry back. If it is hot out, especially during the summer, they stay in the hill and rest. In the spring, ants busily work about their hill when the weather is warm and dry.
- 3. In autumn, the young swarms of ants usually go out to start new <u>colonies</u>.
- 4. Ants like to eat nectar from flowers and seeds that have a sweet taste, such as some kinds of grass seeds, oats, apple seeds, and other such seeds.

The Ants on a Trip (page 21)

- 1. The round hole in the anthill is called a gate.
- 2. The stream of ants that had the white bundles was going to a new hill.

The Farmer Ants (page 25)

- 1. Farmer ants raise grain, or "ant rice," to eat.
- 2. After it rains, the farmer ants carry the stored grain out to dry in the sun.
- 3. If the farmer ants run out of seeds, they like to go where horses have eaten, for there they find scattered oats. In some

Answer Key 3

places, they carry off a lot of grain from the fields. In Florida, there is one kind of ant that climbs the stalk of the millet plant, cuts off the seeds, and carries them home.

- 4. These ants eat the hard grain by using their tongues like files—rasping, filing, and pressing the grain. Then they lick up the oil and juice of the seeds.
- 5. Ants harvest sunflower seeds by climbing onto the disk of a sunflower plant, pulling out the ripe seeds, and carrying them away.

Ants and Their Trades (page 29)

- 1. Bees, ants, and wasps belong to the Hymenoptera order.
- 2. When ants form balls for warmth or safety, it is called "snugging."
- 3. Carpenter ants are harmful because they cut their way into trees and logs, and do much harm to wooden homes or buildings.
- 4. Ants go to war to get slaves, or servants, and to get "cows" (*aphids*, *which will be covered later*).
- 5. When ants go into battle, two soldier ants will often cling to each other by their jaws, until both die. The usual way in which an ant soldier kills a foe is by cutting off the head.

The Slave Ants (page 33)

- 1. Slave-making ants have bodies that look shiny.
- 2. The slave ants build the nest, care for the young, and feed the master ants.
- 3. The master ants find slaves by stealing slave ants when they are eggs, larvae, or pupae.
- 4. When the master ants are ready to make a move, the slaves pick them up and carry them away. The slave and the master lock their jaws, the owner curls up the back of its body, and the slave carries it off.
- 5. Parasol ants carry tiny bits of leaf over their heads.

Wonder Ants (page 36)