

BOOK LIST Biology with Lab Fall 2022 / Spring 2023

Title	Edition	Author/Editor	ISBN	Available on the Academy's Bookstore?
Exploring Creation with Biology	2 nd	Apologia	9781932012545	No
Solutions & Tests for Exploring Creation with Biology	2 nd	Apologia	9781932012552	No
Dissection Kit: Intermediate (strongly recommended)		Home Science Tools	#DE-KITINT	No
Fetal Pig Dissection Specimen (strongly recommended)		Home Science Tools	#PM-PIGXLG	No
Fetal Pig Dissection Guide: Basic (strongly recommended)		Home Science Tools	#DE-GDPIGSP	No
**Compound Microscope: <u>Amscope B120C</u> or comparable (<i>recommended</i>)				
Microscope Kit and Slides for Apologia Biology (recommended)		Home Science Tools	#AM-KTMICR	No

Please note:

- > *The Academy strongly recommends that students personally complete these labs, per their state's high school graduation requirements. Completing labs is also strongly recommended for students who plan to study science at the college level.
- > **In lieu of purchasing a microscope, students may also watch pre-recorded videos that include footage of what they would see through the microscope.
- > Books and materials requirements are subject to change at the discretion of the instructors.



> Descriptions and disclaimers can be found on the following pages of this PDF.

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Exploring Creation with Biology by Apologia

DESCRIPTION: Exploring Creation with Biology is a high school level textbook that offers a highly readable and understandable approach to the study of biology. It covers the major topics of biology: the scientific method, the five-kingdom classification scheme, a study of the organisms belonging to each of the five kingdoms of living things through microscopy and dissections, cellular biology, biochemistry, molecular biology, Mendelian genetics, the evidence for biblical creation versus Darwinian evolution, and ecology. The textbook includes engaging and relevant experiments that are easy for students to perform at home.

→ REASON FOR TEACHING: Several different high school biology textbooks were reviewed for this course. This particular textbook was chosen because it teaches a manageable volume of solid biological science in a readable and easily understood format, and from a Christian, biblical-based worldview.

DISCLAIMER: This textbook is solid in its teaching of biblical-based creation, and consistently provides scientific evidence for young earth biblical creation throughout the text. It also includes discussion of Darwinian evolution and theories that try to blend biblical creation with evolution (old earth theories such as the gap theory, day-age theory, and theistic evolution). It is critical to discuss these theories in class so that students can engage in a thoughtful defense of biblical creation.



Solutions & Tests for Exploring Creation with Biology

DESCRIPTION: As a companion manual to Exploring Creation with Biology, this text includes solutions to the Study Guides and Module Summaries for each module presented in the textbook. This manual also includes Module Tests and Unit Tests, as well as solutions to those tests.

→ REASON FOR TEACHING: This manual is a necessary companion to the textbook so that the student or home teacher may check the student's answers to the Study Guide and Module Summary questions.

DISCLAIMER: The Module Tests and Unit Tests that are included in this manual will be the tests that are administered in this course. If the student is permitted to use the manual to check their answers to the Study Guides and Module Summaries, then he will have access to the tests and solutions. **It is recommended for that reason to separate the manual into two parts:** the Study Guide and Module Summary solutions that the home teacher wants the student to have access to, and the Module Tests and Unit Tests and their solutions that the home teacher does not want the student to have access to.

Dissection Kit: Specimens & Equipment

DESCRIPTION: This kit includes the preserved specimens necessary to complete the laboratory experiments in the text, as well as full-color dissection guides to help students identify anatomical structures. It does not contain a fetal pig, so the fetal pig specimen should be purchased separately.

→ REASON FOR TEACHING: Video laboratory sessions will be provided for course participants. It would be possible for a student to simply watch the provided videos and be a passive participant in the laboratory experiments. However, the Academy recommends purchasing the dissection kit and specimens so that students can participate in highly valuable hands-on dissection work. Students who dissect the specimens with their own hands and study them with their own eyes will have a



deeper and broader understanding of the organisms studied. Additionally, students will have the opportunity to learn and develop technical laboratory experience and skills.

DISCLAIMER: Some students may find the dissection of preserved specimens objectionable. Additionally, the specimens are preserved in a toxic holding solution that could be a respiratory, skin, or eye irritant. The Safety Data Sheet (SDS) available from the supplier outlines pertinent safety information. The dissection kit also includes a scalpel blade and handle, which could cause physical injury if used carelessly or improperly.

Fetal Pig Dissection Specimen & Discussion Guide

→ REASON FOR TEACHING: Dissection of the fetal pig is not included in the textbook. However, analyzing the basic structures of mammalian anatomy is important in the study of biology. This specimen will be used as a supplemental dissection so that students can explore and learn mammalian anatomical structures. The full-color dissection guide will aid students in the dissection technique of the fetal pig and help them to identify anatomical structures in the specimen.

Compound Microscope with Kit & Slides

DESCRIPTION: This item is a compound microscope with light source and mechanical stage, capable of magnification of 40X up through at least 1000X. The accompanying kit includes all of the prepared slides and slide materials necessary to complete the microscopy experiments in the textbook.

→ REASON FOR USING: Video laboratory sessions will be provided for course participants. It would be possible for a student to simply watch the provided videos and be a passive participant in the laboratory experiments. However, the Academy recommends purchasing the microscope and accompanying Microscope Kit and



Slides so that students can participate in highly valuable hands-on microscopy work. Students who view the organisms under a microscope with their own eyes will have a deeper and broader understanding of the organisms studied, as well as receiving technical laboratory experience and skills.

DISCLAIMER: A microscope and accompanying materials are a costly investment, but families can share or borrow these items.