Daily Lesson Plans
for
Exploring Creation with
Physical Science
(Second Edition)

My Father’s World®
Exploring Creation with Physical Science, Second Edition

Apologia has earned the reputation of being the premier science course for college-bound students. The text is written in a friendly, conversational style and is easy to understand, even for parents with minimal science background. The simple experiments, user-friendly format, and personal approach set it apart from standard textbooks. The program is written from a Christian worldview and takes a balanced approach toward controversial subjects, examining all viewpoints while explaining the scientific facts behind differing theories.

Apologia science courses appeal to both parents/teachers and students because they are easy to understand, practical, and organized. They also encourage critical thinking skills in an interesting format. We are so confident in this science course that it is the only one we carry for 7th grade through high school.

Dr. Jay L. Wile holds a Ph.D. in nuclear chemistry and a B.S. in chemistry from the University of Rochester. A former university professor, he has won several awards for excellence in teaching and has presented numerous lectures on the topics of nuclear chemistry, Christian apologetics, homeschooling, and creation vs. evolution. In addition, he has published thirty articles on these subjects in nationally recognized journals.

How to Use These Plans

Before beginning this course, parents need to read thoroughly the TEACHER’S NOTES at the beginning of Solutions and Tests for Exploring Creation with Physical Science. Students need to read thoroughly the STUDENT NOTES at the beginning of the textbook. (Note that the word “lab” refers to the experiments in the text.)

Schedule science four days a week. Monday through Thursday works best, with Friday free or used for catch-up, review, or tests as needed. If you find that a lesson is too lengthy, simply end the lesson and resume the following day. By Friday you should catch up with the week’s lessons.

Plan to spend two weeks on each module, which gives you 32 weeks for science (or 34 if you use the quarterly tests) – thus allowing several weeks for review or catch-up if needed.

For record-keeping purposes, use the line to the left of “Day 1,” “Day 2,” etc., to write the date the student completes each lesson.

A “Test Scores” sheet is provided so that all test scores can be recorded in one place for a permanent record. Read the paragraph on page v in Solutions and Tests for Exploring Creation with Physical Science regarding cumulative tests, which are quarterly tests. If you choose to use the cumulative tests, plan to use one day for review, and one day for the cumulative test. These extra days are included in the day count in the lesson plans, but are optional.

CD-ROM Multimedia Companion

The CD provides additional visual instruction, especially valuable for students who are more visually oriented, for students wanting a richer science course, and for parents who want extra help in presenting information. The components of the optional CD-ROM Multimedia Companion are scheduled within these lesson plans. Each CD item is marked with an asterisk (*). Key vocabulary words are listed at the beginning of the lesson plans for each module; the pronunciations are found on the CD. The other items marked with an asterisk (*) are multimedia
instruction, examples, figures and experiments. The CD enhancements of the experiments are to be viewed following the experiments.

Lab Supplies

For your convenience we have compiled a master list of all the lab supplies needed for the entire year. (See “Master List: Lab Supplies to Purchase for the Year” in these lesson plans.) The master list does not include items commonly found at home, such as water. We recommend that you purchase all of these supplies now, before beginning the school year, so that they will be on hand.

We also list lab supplies for each module at the beginning of each module plan, if you prefer to purchase supplies as needed. The lab supply list for each module does include items commonly found at home. Reminders to purchase and gather lab supplies are given for each module.
Master List: Lab Supplies to Purchase for the Year

Note: The Master List does not include perishable items that should not be purchased far in advance, such as eggs and butter.

[My Father’s World has reorganized the Apologia supply lists to show an organized master list ordered by the store type most likely to carry the items. Following is an abbreviated sample of the lists.]

Grocery
- dish soap
- 2 empty 12-ounce aluminum cans
- olive oil
- toilet paper
- … (plus 16 other items not included in this sample)

Hardware
- tape (preferably electrical tape, but Scotch® or masking tape will work)
- 1 sheet of sandpaper
- tape measure, meterstick, or yardstick
- flashlight
- … (plus 10 other items not included in this sample)

Office supplies
- eraser
- metal paper clips
- black marker
- 3” x 5” index card
- … (plus 9 other items not included in this sample)

Drugstore
- hydrogen peroxide
- 2 cotton balls
- candle (DO NOT use a lighter or any other gas or alcohol burner. You must use a candle in order to keep the experiments safe.)
- … (plus 4 other items not included in this sample)

Other
- strainer
- comb
- aluminum pie pan
- marble
- … (plus 21 other items not included in this sample)
TEST SCORES  
*Exploring Creation with Physical Science*  
by Dr. Jay L. Wile

Name ____________________________________________

<table>
<thead>
<tr>
<th>MODULE #1</th>
<th>Date</th>
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<td>MODULE #5</td>
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[All modules are listed in My Father’s World Lesson Plans]
Module #3: The Atmosphere

☐ Look again at the lab supplies list for Module #3. Be sure you have already purchased any needed supplies.

☐ Also look at the lab supplies list for Module #4 (which you will need in two weeks). Plan to purchase any supplies you do not already have.

Lab Supplies for Module #3

☐ ice
☐ bowls
☐ balloon
☐ frying pan
☐ two empty 12-ounce aluminum cans
☐ tongs
☐ 1 quart or 1-liter plastic bottle
☐ eye protection such as goggles or safety glasses

__________ Day 17 pages 55-60a

*Listen to the following vocabulary words on the CD if you need help with pronunciation: auroras, australis, barometer, borealis, chlorofluorocarbons, exosphere, heterosphere, homosphere, ionosphere, mesopause, mesosphere, stratopause, stratosphere, thermosphere, tropopause, troposphere.

- Introduction
- Atmospheric Pressure
- EXPERIMENT 3.1
  *Video about Atmospheric Pressure (Figure 3.1) on the CD
  *Animation about the Barometer (Figure 3.2) on the CD
- ON YOUR OWN 3.1, 3.2

__________ Day 18 pages 60b-62a

- The Layers of Earth’s Atmosphere
- ON YOUR OWN 3.3, 3.4

__________ Day 19 pages 62b-66a

- The Homosphere
  *Video for Figure 3.4 on the CD
- ON YOUR OWN 3.5, 3.6

__________ Day 20 pages 66b-69a

- What is Temperature?
- EXPERIMENT 3.2
  *Animation about heat on the CD
- ON YOUR OWN 3.7, 3.8
Day 21
- The Temperature Gradient in the Homosphere
- The “Hole” in the Ozone Layer
- ON YOUR OWN 3.9, 3.10

Day 22
- The Heterosphere
  *Video for Figure 3.7 on the CD
- ON YOUR OWN 3.11

Day 23
- pages 79-80 STUDY GUIDE FOR MODULE #3

Day 24
- TEST FOR MODULE #3
  Enter test score on TEST SCORES form.