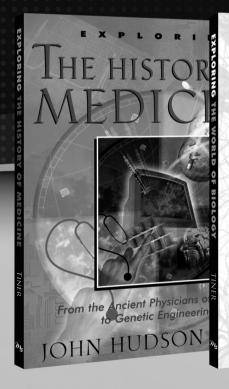
# CONCEPTS OF MEDICINE & BIOLOGY

# Parent Lesson Planner (PLP)







From Mushrooms to Complex Life Forms

JOHN HUDSON TINER



Weekly Lesson Schedule



Student Worksheets



Quizzes & Test



Answer Key

7th – 9th grade

1 Year Science

1/2 Credit

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Unless otherwise noted, Scripture quotations are from the New King James Version of the Bible.

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1 Peter 3:15; NKJV

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#### Lessons for a 36-week course!

**Overview:** This *Concepts of Medicine and Biology PLP* contains materials for use with *Exploring the History of Medicine* and *Exploring the World of Biology* in the Exploring series. Materials are organized by each book in the following sections:



**Features:** Each suggested weekly schedule has two or three easy-to-manage lessons which combine reading, worksheets, and vocabulary-building opportunities including an expanded glossary for each book. Designed to allow your student to be independent, materials in this resource are divided by section so you can remove quizzes, tests, and answer keys before beginning the coursework. As always, you are encouraged to adjust the schedule and materials needed to in order to best work within your educational program.

**Workflow:** Students will read the pages in their book and then complete each section of the PLP. They should be encouraged to complete as many of the activities and projects as possible as well. Tests are given at regular intervals with space to record each grade. If used with younger students, they may be given the option of only choosing activities or projects of interest to them and taking open book tests.

**Lesson Scheduling**: Space is given for assignment dates. There is flexibility in scheduling. For example, the parent may opt for a M–W schedule rather than a M, W, F schedule. Each week listed has five days but due to vacations the school work week may not be M–F. Adapt the days to your school schedule. As the student completes each assignment, he/she should put an "X" in the box.

	Approximately 30 to 45 minutes per lesson, two to three days a week	Course includes books from creationist authors with solid, biblical worldviews:
	Includes answer keys for worksheets, quizzes, and semester tests	John Hudson Tiner — Exploring the History of Medicine, Exploring the World of Biology
#=	Worksheets for each chapter	John Hudson Tiner received five National Science Foundation teaching fellowships during his 12 years as a teacher of mathematics and science that allowed
*	Quizzes are included to help reinforce learning and provide assessment opportunities; optional semester tests included	him to study graduate chemistry, astronomy, and mathematics. He also worked as a mathematician and cartographer for the Defense Mapping Agency, Aerospace Center in St. Louis, MO.
	Designed for grades 7 to 9 in a one- year course to earn 1/2 science credit	Tiner has received numerous honors for his writing, including the Missouri Writer's Guild award for best juvenile book for <i>Exploring the World of Chemistry</i> . He and his wife, Jeanene, live in Missouri.

#### **Concepts of Medicine and Biology**

#### **Course Description**

This is the suggested course sequence that allows one core area of science to be studied per semester. You can change the sequence of the semesters per the needs or interests of your student; materials for each semester are independent of one another to allow flexibility.

#### **Semester 1: Medicine**

From surgery to vaccines, man has made great strides in the field of medicine. Quality of life has improved dramatically in the last few decades alone, and the future is bright. But students must not forget that God provided humans with minds and resources to bring about these advances. A biblical perspective of healing and the use of medicine provides the best foundation for treating diseases and injury. In *Exploring the History of Medicine*, author John Hudson Tiner reveals the spectacular discoveries that started with men and women who used their abilities to better mankind and give glory to God. The fascinating history of medicine comes alive in this book, providing students with a healthy dose of facts, mini-biographies, and vintage illustrations.

#### **Semester 2: Biology**

The field of biology focuses on living things, from the smallest microscopic protozoa to the largest mammal. In this book you will read and explore the life of plants, insects, spiders and other arachnids, life in water, reptiles, birds, and mammals, highlighting God's amazing creation. You will learn about biological classification, how seeds spread around the world, long-term storage of energy, how biologists learned how the stomach digested food, the plant that gave George de Mestral the idea of Velcro, and so much more. For most of history, biologists used the visible appearance of plants or animals to classify them. They grouped plants or animals with similar-looking features into families. In the 1990s, biologists began extracting DNA and RNA from cells as a guide to how plants or animlas should be grouped. Like visual structures, these reveal the underlying design of creation. *Exploring the World of Biology* is a fascinating look at life-from the smallest proteins and spores, to the complex life systems of humans and animals.

# First Semester Suggested Daily Schedule

Date	Day	Assignment	Due Date	<b>√</b>	Grade
		First Semester-First Quarter — Exploring the History of			
	Day 1	Read pages 4–10 • Exploring the World of Medicine • (EWM)			
	Day 2				
Week 1	Day 3	The First Physicians - Questions  Medicine Ch 1: Worksheet 1 • Page 17 • Lesson Plan • (LP)			
	Day 4				
	Day 5	Read pages 12–16 • (EWM)			
	Day 6	Greek Medicine Goes Wrong - Questions  Medicine Ch 2: Worksheet 1 • Page 19 • (LP)			
	Day 7				
Week 2	Day 8	Read pages 18–22 • (EWM)			
	Day 9				
	Day 10	Fabric of the Body - Questions  Medicine Ch 3: Worksheet 1 • Page 21 • (LP)			
	Day 11				
	Day 12	Read pages 24–30 • (EWM)			
Week 3	Day 13				
	Day 14	Father of Modern Surgery - Questions  Medicine Ch 4: Worksheet 1 • Page 23 • (LP)			
	Day 15				
	Day 16	Read pages 32–36 • (EWM)			
	Day 17				
Week 4	Day 18	The Living River - Questions  Medicine Ch 5: Worksheet 1 • Page 25 • (LP)			
	Day 19				
	Day 20	Medicine Chs 1-5 Quiz 1 • Page 97 • (LP)			
	Day 21				
	Day 22	Read pages 38–42 • (EWM)			
Week 5	Day 23				
	Day 24	The Invisible Kingdom - Questions  Medicine Ch 6: Worksheet 1 • Page 27 • (LP)			
	Day 25				
	Day 26				
	Day 27	Read pages 44–50 • (EWM)			
Week 6	Day 28				
	Day 29	Triumph Over Smallpox - Questions  Medicine Ch 7: Worksheet 1 • Page 29 • (LP)			
	Day 30				
	Day 31				
	Day 32	Read pages 52–58 • (EWM)			
Week 7	Day 33				
/	Day 34	Davy Deadens Pain - Questions  Medicine Ch 8: Worksheet 1 • Page 31 • (LP)			
	Day 35				

Date	Day	Assignment	Due Date	<b>√</b>	Grade
Duto	Day 36	Accignment		, 	Ordae
	Day 37	Read pages 60–66 • (EWM)			
W. 1 o	Day 38	Team pages of the (2 HTI)			
Week 8	Day 39	Morton Defeats the Pain of Surgery - Questions  Medicine Ch 9: Worksheet 1 • Page 33 • (LP)			
	Day 40				
	Day 41	Read pages 68–74 • (EWM)			
	Day 42				
Week 9	Day 43	Death House in Vienna - Questions  Medicine Ch 10: Worksheet 1 • Page 35 • (LP)			
	Day 44				
	Day 45	Medicine Chs 6-10 Quiz 2 • Page 99 • (LP)			
		First Semester-Second Quarter — Exploring the History of Medi	cine		
	Day 46	Read pages 76–84 • (EWM)			
	Day 47				
Week 1	Day 48	The Chemist Who Became a Doctor - Questions  Medicine Ch 11: Worksheet 1 • Page 37 • (LP)			
	Day 49				
	Day 50	Read pages 86–90 • (EWM)			
	Day 51	Joseph Lister Fights Infection - Questions  Medicine Ch 12: Worksheet 1 • Page 39 • (LP)			
	Day 52				
Week 2	Day 53	Read pages 92–96 • (EWM)			
	Day 54				
	Day 55	The Search for Disease Germs - Questions  Medicine Ch 13: Worksheet 1 • Page 41 • (LP)			
	Day 56				
	Day 57	Read pages 98–106 • (EWM)			
Week 3	Day 58				
	Day 59	Louis Pasteur Again - Questions  Medicine Ch 14: Worksheet 1 • Page 43 • (LP)			
	Day 60				
	Day 61	Read pages 108–112 • (EWM)			
	Day 62				
Week 4	Day 63	Dr. Lind's Limes - Questions  Medicine Ch 15: Worksheet 1 • Page 45 • (LP)			
	Day 64				
	Day 65	Medicine Chs 11-15 Quiz 3 • Page 101 • (LP)			
	Day 66				
	Day 67	Read pages 114–120 • (EWM)			
Week 5	Day 68				
	Day 69	The Hidden Hunger - Questions  Medicine Ch 16: Worksheet 1 • Page 47 • (LP)			
	Day 70				

Date	Day	Assignment	Due Date	$\checkmark$	Grade
	Day 71				
	Day 72	Read pages 122–128 • (EWM)			
Week 6	Day 73				
WCCK 0	Day 74	Mysterious Rays - Questions Medicine Ch 17: Worksheet 1 • Page 49 • (LP)			
	Day 75				
	Day 76				
	Day 77	Read pages 130–134 • (EWM)			
Week 7	Day 78				
WCCK /	Day 79	Useful Radiation - Questions  Medicine Ch 18: Worksheet 1 • Page 51 • (LP)			
	Day 80				
	Day 81	Read pages 136–140 • (EWM)			
	Day 82				
Week 8	Day 83	Wonder Drugs - Questions  Medicine Ch 19: Worksheet 1 • Page 53 • (LP)			
	Day 84				
	Day 85	Read pages 142–146 • (EWM)			
	Day 86	Mold Battles Bacteria - Questions  Medicine Ch 20: Worksheet 1 • Page 55 • (LP)			
	Day 87				
Week 9	Day 88	Read pages 148–152 • (EWM) Medicine in Today's World - Questions Medicine Ch 21: Worksheet 1 • Page 57 • (LP)			
	Day 89				
	Day 90	<b>Medicine Chs 16-21 Quiz 4 •</b> Page 103 • (LP)			
		Medicine Chs 1-21 Test 1 • Page 105 • (LP)			
		Mid-Term Grade			

# Second Semester Suggested Daily Schedule

Date	Day	Assignment	Due Date	<b>√</b>	Grade
		Second Semester-Third Quarter — Exploring the World of Bio			
	Day 91				
	Day 92	Read pages 6–11 • Exploring the World of Biology • (EWB)			
Week 1	Day 93	Treat pages 0-11 · Exploring the worth of Bloody · (Ewb)			
	Day 94	Read pages 12–14 • (EWB)			
	Day 95	read pages 12 11 (EWB)			
	Day 96				
	Day 97	The Hidden Kingdom - Questions Biology Ch 1: Worksheet 1 • Page 61 • (LP)			
Week 2	Day 98	bloogy Cir 1: Worksheet 1 - 1 age 01 - (L1)			
WCCK Z	Day 99	The Hidden Kingdom - Questions <b>Biology Ch 1: Worksheet 2 •</b> Page 63 • (LP)			
	Day 100	8/			
	Day 101				
	Day 102	Read pages 16–21 • (EWB)			
Week 3	Day 103	1 0			
	Day 104	Read pages 22–26 • (EWB)			
	Day 105				
	Day 106				
	Day 107	The Invisible Kingdom - Questions <b>Biology Ch 2: Worksheet 1 •</b> Page 65 • (LP)			
Week 4	Day 108	, , , , , , , , , , , , , , , , , , ,			
	Day 109	The Invisible Kingdom - Questions Biology Ch 2: Worksheet 2 • Page 67 • (LP)			
	Day 110				
	Day 111	Read pages 28–36 • (EWB)			
	Day 112				
Week 5	Day 113	Exploring Biological Names - Questions Biology Ch 3: Worksheet 1 • Page 69 • (LP)			
	Day 114				
	Day 115	Biology Chs 1-3 Quiz 1 • Page 109 • (LP)			
	Day 116				
	Day 117	Read pages 38–46 • (EWB)			
Week 6	Day 118				
week o	Day 119	Growing a Green World - Questions  Biology Ch 4: Worksheet 1 • Page 71 • (LP)			
	Day 120				
	Day 121				
	Day 122	Read pages 48–54 • (EWB)			
Week 7	Day 123				
WCCK /	Day 124	Food for Energy and Growth - Questions Biology Ch 5: Worksheet 1 • Page 73 • (LP)			
	Day 125				

Date	Day	Assignment	Due Date	<b>√</b>	Grade
	Day 126	7.00.go			Orado
	Day 127	Read pages 56–64 • (EWB)			
W/ 1 o	Day 128				
Week 8	Day 129	Digestion - Questions Biology Ch 6: Worksheet 1 • Page 75 • (LP)			
	Day 130	-			
	Day 131	Read pages 66–72 • (EWB)			
	Day 132				
Week 9	Day 133	Plant Inventors - Questions Biology Ch 7: Worksheet 1 • Page 77 • (LP)			
	Day 134				
	Day 135	Biology Chs 4-7 Quiz 2 • Page 111 • (LP)			
		Second Semester-Fourth Quarter — Exploring the World of Biol	logy		
	Day 136				
	Day 137	Read pages 74–82 • (EWB)			
Week 1	Day 138				
WCCK 1	Day 139	Insects - Questions Biology Ch 8: Worksheet 1 • Page 79 • (LP)			
	Day 140	<u> </u>			
	Day 141				
	Day 142	Read pages 84–90 • (EWB)			
Week 2	Day 143				
	Day 144	Spiders and Other Arachnids - Questions Biology Ch 9: Worksheet 1 • Page 81 • (LP)			
	Day 145				
	Day 146				
	Day 147	Read pages 92–98 • (EWB)			
Week 3	Day 148				
	Day 149	Life in Water - Questions  Biology Ch 10: Worksheet 1 • Page 83 • (LP)			
	Day 150				
	Day 151				
	Day 152	Read pages 100–108 • (EWB)			
Week 4	Day 153				
	Day 154	Reptiles - Questions Biology Ch 11: Worksheet 1 • Page 85-86 • (LP)			
	Day 155				
	Day 156				
	Day 157	Biology Chs 8-11 Quiz 3 • Page 113 • (LP)			
Week 5	Day 158				
	Day 159	Read pages 110–118 • (EWB)			
	Day 160				

Date	Day	Assignment	Due Date	✓	Grade
	Day 161				
	Day 162	Birds - Questions Biology Ch 12: Worksheet 1 • Page 87-88 • (LP)			
Week 6	Day 163				
	Day 164	Read pages 120–125 • (EWB)			
	Day 165				
	Day 166				
	Day 167	Read pages 126–130 • (EWB)			
Week 7	Day 168				
,,	Day 169	Mammals - Questions Biology Ch 13: Worksheet 1 • Page 89 • (LP)			
	Day 170				
	Day 171				
	Day 172	Mammals - Questions Biology Ch 13: Worksheet 2 • Page 91 • (LP)			
Week 8	Day 173				
	Day 174	Read Pages 132–140 • (EWB)			
	Day 175				
	Day 176				
Week 9	Day 177	Frauds, Hoaxes and Wishful Thinking - Questions <b>Biology Ch 14: Worksheet 1</b> • Page 93-94 • (LP)			
	Day 178				
	Day 179	Biology Chs 12-14 Quiz 4 • Page 115 • (LP)			
	Day 180				
		Biology Chs 1-14 Test 1 • Page 117 • (LP)			
		Final Grade			

#### **Suggested Optional Science Lab**

There are a variety of companies that offer science labs that complement our courses. These items are only suggestions, not requirements, and they are not included in the daily schedule. We have tried to find materials that are free of evolutionary teaching, but please review any materials you may purchase. The following items are available from www.HomeTrainingTools.com.

Concepts of Medicine & Biology

We highly recommend the purchase of good microscope and general slide sets. Scientific coloring books may also be helpful.

The History of Medicine

BE-BACTKIT Bacteria Experiment Kit

CM-HUMXRAY True-to-Life Human X-Rays Set

Recommended Microscope Slides:

MS-SETHPAT Human Pathology Slide Set

#### **Special Projects**

The Exploring series offers a unique perspective filled with biographical, historical, and scientific perspectives. By highlighting the work and relevance of scientists and innovators, students are introduced to the people behind the knowledge and discoveries that continue to impact their world. This provides exceptional learning opportunities above and beyond the worksheets, quizzes, and tests. Below are three areas of possible activities or bonus point projects that can be undertaken to enhance study.

#### Biographical

- Select your favorite scientist mentioned in the book and do a research paper on this person's life and/or
  work. Be sure to include details that enhance the understanding of why they worked in the area of science that they chose, information on their worldview (Christian or secular) and why their work remains
  relevant.
- There have been some amazing discoveries by women see if you can find three discoveries by researching at your local library or online at parent-approved sites.

#### Historical

- Do three short essays no more than two typed pages each on discoveries that laid the groundwork for future science fields or the advancement of knowledge.
- Discover where 25 important discoveries related to mathematics or science took place; mark the map for
  each place and label with the name of each discovery.
- The Bible contains some amazing mathematical and scientific information. Using the geneaological information in Genesis 5, see if you can calculate how many years took place between creation and the Flood of Noah.

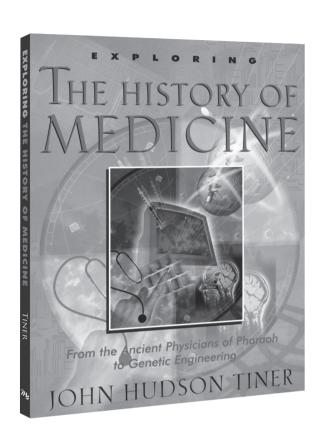
#### Scientific

• Imagine an invention related to mathematics, biology, chemistry, or physical science that could change the way you and others live. See if you can visualize your invention by drawing it out or providing details that would enable someone else to understand the relevance of your invention and how it works.

### **Applied Learning**

These ideas provide a way for the student to acquire knowledge and then apply it — whether that is done in a technical sense or by being able to recognize the concepts at work in the course of their daily experiences. Consider doing one of the two following options as an opportunity to earn bonus points or to extend the learning process:

- Take a spiral notebook and name it "My Learning Observations." Then, using the following concepts, mark the date and time you observe each example over a two-week period. Remember, science is happening around you all the time in every day life, so make sure your observations correlate with mathematics, biology, chemistry, or physical science.
- You can keep a running study journal using the words and people to know during your study. By writing down the definition of words, or the contribution of an individual, you can develop a deeper understanding of the subject matter and have notes available when studying for quizzes and exams.



Medicine Worksheets
for Use with

Exploring the History of Medicine

Ī≣	Exploring	The First	Day 2	Chapter 1	Name
1=	Medicine	Physicians, p. 4–10	Day 3	Worksheet 1	

Answer T or F for true or false, or select the letter for the phrase that best completes the sentence.

- **T F** 1. The medical discoveries of the Egyptian doctor Imhotep are well-known today.
- **A B** 2. The most famous ancient Greek doctor was (A. Plato, B. Hippocrates).
- **T F** 3. One of the Greek treatments for disease was to have the sick person dream away the sickness in a pagan temple.
- **A B** 4. Older doctors predicted that doctors who followed Hippocrates' teaching would be (A. punished, B. rewarded) by the gods and goddesses.
- **A B** 5. The Hippocratic Oath for doctors is (A. a pledge of proper conduct, B. a schedule of prices a doctor should charge).
- **A B** 6. The title given to Hippocrates is (A. Father of Greek Philosophy, B. Father of Medicine).
- **A B** 7. The most important physician during Roman times was (A. Galen, B. Socrates).
- **A B** 8. The city of Alexandria was noted for its huge (A. aqueduct, B. library).
- **A B** 9. Galen learned firsthand about the human body from (A. dissecting the bodies of criminals, B. treating injured gladiators).
- **T F** 10. When Galen went to Rome, he was put in prison.
- **T F** 11. Galen believed that the marvelous complexity of the human body pointed to a Creator.