





# INTRO TO METEOROLOGY & ASTRONOMY

## Parent Lesson Planner (PLP)



-  Weekly Lesson Schedule
-  Student Worksheets
-  Quizzes & Test
-  Answer Key

7th – 9th grade

1 Year  
Science

1/2 Credit

First printing: March 2013

Second printing: August 2013

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Master Books®, P.O. Box 726, Green Forest, AR 72638

Master Books® is a division of the New Leaf Publishing Group, Inc.

ISBN: 978-0-89051-730-7

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**Printed in the United States of America**

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that is in you, with meekness and fear.*

1 Peter 3:15; NKJV





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## Lessons for a 36-week course!

**Overview:** This *Introduction to Meteorology and Astronomy PLP* contains materials for use with *The Weather Book* and *The Astronomy Book* in the Wonders of Creation series. Materials are organized by book in the following sections:






	Study guide worksheets
	Quizzes
	Semester Tests
	Answer Key

Suggested Optional Science Lab See page 12
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**Features:** Each suggested weekly schedule has 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, three days a week
	Includes answer keys for worksheets, quizzes, and semester tests
	Worksheets for each chapter
	Quizzes are included to help reinforce learning and provide assessment opportunities; optional semester exams included
	Designed for grades 7 to 9 in a one-year course to earn 1/2 science credit

Course includes books from creationist authors with solid, biblical worldviews:

### **Mike Oard** - *The Weather Book*

Michael Oard earned his master’s degree in atmospheric science in 1973 from the University of Washington. He was a meteorologist with the National Weather Service beginning in 1973 and lead forecaster in Great Falls, Montana from 1981 to 2001. He has written numerous books related to the Ice Age, geology and the Great Flood.

### **Dr. Jonathan Henry** - *The Astronomy Book*

Dr. Jonathan Henry earned his doctorate from the University of Kentucky in chemical engineering, and is now chairman of the science division and Professor of Natural Science at Clearwater Christian College in Florida. He and his wife Sharon began homeschooling their four children in 1992.

# Contents

Introduction.....	5
Suggested Daily Schedule .....	6
Worksheets	
Meteorology Worksheets .....	13
Astronomy Worksheets.....	65
Quizzes and Tests	
Meteorology Quizzes.....	93
Meteorology Test.....	103
Astronomy Quizzes .....	107
Astronomy Test .....	115
Answer Key	
Meteorology Worksheets .....	121
Astronomy Worksheets.....	130
Meteorology Quizzes.....	134
Meteorology Tests.....	138
Astronomy Quizzes .....	140
Astronomy Tests.....	143
Glossary .....	145

## Introduction to Meteorology and Astronomy

### Course Description

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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: Meteorology

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The Earth was created to be the dwelling place of man. It is a complex world and its weather patterns affect our lives every day. Whether you live near the equator, a polar region, or somewhere in between, knowledge of the weather is important.

*The Weather Book* will teach you: why our exact distance from the sun allows life on earth, how the weather on the other side of the earth affects you, how clouds form and how to identify the different types, what the difference is between a cold and warm front, why you can often see lightning long before you can hear thunder, how to build your own weather station, how to survive in dangerous weather, what the greenhouse effect and the ozone hole are, what Noah's flood and the Ice Age have in common, how weatherpersons forecast hurricanes and tornadoes, how to read a weather map, and what our responsibility is to the environment.

Learning about the weather is fun! It will change the way you look at the clouds in the sky. Now you'll have more of an understanding about what is going on miles above your head. And when you hear a weather report on television, you will understand so much more about the world around you.

### Semester 2: Astronomy

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One thing we have in common with the ancients is that all of the human race has gazed at the night sky and the bright morning, and wondered, "What's out there?" Our universe is so vast and awe-inspiring that to learn about it is to learn about ourselves.

*The Astronomy Book* will teach you: what long-ago astronomers thought about other worlds, solar system facts, how constellations relate to astrology, the history of space exploration, whether black holes exist, the origin and age of the moon, why Mars doesn't support life, the composition of stars, supernova remnants and the myth of star birth, asteroid legends and the extinction of the dinosaurs, whether there are planets outside our solar system and if they could be home to intelligent life, what UFOs are, and the age of comets and meteor showers. Learning about the universe is huge fun!

In the almost infinite expanse above us, we can examine planets, galaxies, and phenomena so beautiful and complex that we never outgrow a childlike wonder. We see our own reflection in the moon, the stars, and in comet trails. The more we learn, the less we fear!

## First Semester Suggested Daily Schedule

Date	Day	Assignment	Due Date	✓	Grade
First Semester-First Quarter — <b>The Weather Book</b>					
Week 1	Day 1	Read Pages 4-5 • <i>The Weather Book</i> • (WB)			
	Day 2				
	Day 3	Introduction-Words to Know, Questions 1-4 on <b>Weather Intro: Worksheet 1</b> • Page 15 • Lesson Plan (LP)			
	Day 4				
	Day 5	Read Pages 6-7 • (WB)			
Week 2	Day 6	God Created-Words to Know, Questions 1-6 on <b>Weather Ch1: Worksheet 1</b> • Page 17 • (LP)			
	Day 7				
	Day 8	Read Pages 8-9 • (WB)			
	Day 9				
	Day 10	What Causes Weather-Words to Know, Questions 1-6 on <b>Weather Ch2: Worksheet 1</b> • Page 19 • (LP)			
Week 3	Day 11	Read Pages 10-11 • (WB)			
	Day 12				
	Day 13	World Climate Zones-Words to Know, Questions 1-5 on <b>Weather Ch2: Worksheet 2</b> • Page 21 • (LP)			
	Day 14				
	Day 15	Read Pages 12-13 • (WB)			
Week 4	Day 16	Weather Facts-Words to Know, Questions 1-5 on <b>Weather Ch2: Worksheet 3</b> • Page 23 • (LP)			
	Day 17				
	Day 18	Read Pages 14-15 • (WB)			
	Day 19				
	Day 20	Weather Map-Words to Know, Questions 1-5 on <b>Weather Ch2: Worksheet 4</b> • Page 25 • (LP)			
Week 5	Day 21	Read Pages 16-17 • (WB)			
	Day 22				
	Day 23	Jet Stream-Words to Know, Questions 1-8 on <b>Weather Ch2: Worksheet 5</b> • Page 27 • (LP)			
	Day 24				
	Day 25	Read Pages 18-19 • (WB)			
Week 6	Day 26	El Nino-Words to Know, Questions 1-3 and Activities on <b>Weather Ch2: Worksheet 6</b> • Page 29 • (LP)			
	Day 27				
	Day 28	<b>Weather Ch1-2: Quiz 1</b> • Page 95 • (LP)			
	Day 29				
	Day 30	Read Pages 20-21 • (WB)			

Date	Day	Assignment	Due Date	✓	Grade
Week 7	Day 31	Water in the Atmosphere-Words to Know, Questions 1-4 on <b>Weather Ch3: Worksheet 1</b> • Page 31 • (LP)			
	Day 32				
	Day 33	Read Pages 22-25 • (WB)			
	Day 34				
	Day 35	Clouds-Words to Know, Questions 1-9 on <b>Weather Ch3: Worksheet 2</b> • Page 33 • (LP)			
Week 8	Day 36	Read Pages 26-29 • (WB)			
	Day 37				
	Day 38	Warm Front and Cold Fronts-Questions 1-8 on <b>Weather Ch3: Worksheet 3</b> • Page 35 • (LP)			
	Day 39				
	Day 40	Read Pages 30-31 • (WB)			
Week 9	Day 41	Fog-Questions 1-6 on <b>Weather Ch3: Worksheet 4</b> • Page 37 • (LP)			
	Day 42				
	Day 43	Read Pages 32-35 • (WB)			
	Day 44				
	Day 45	Thunderstorms-Questions 1-5 on <b>Weather Ch4: Worksheet 1</b> • Page 39 • (LP)			
First Semester-Second Quarter — <i>The Weather Book</i>					
Week 1	Day 46	Read Pages 36-37 • (WB)			
	Day 47				
	Day 48	Lightning-Words to Know, Questions 1-8 and Activities on <b>Weather Ch4: Worksheet 2</b> • Page 41 • (LP)			
	Day 49				
	Day 50	Read Pages 38-39 • (WB)			
Week 2	Day 51	Dangerous Thunderstorms-Words to Know, Questions 1-8 on <b>Weather Ch5: Worksheet 1</b> • Page 43 • (LP)			
	Day 52				
	Day 53	Read Pages 40-41 • (WB)			
	Day 54				
	Day 55	Hail and Wind Damage-Words to Know, Questions 1-7 on <b>Weather Ch5: Worksheet 2</b> • Page 45 • (LP)			
Week 3	Day 56	Read Pages 42-47 • (WB)			
	Day 57				
	Day 58	Tornadoes-Words to Know, Questions 1-10 and Activities on <b>Weather Ch5: Worksheet 3</b> • Page 47 • (LP)			
	Day 59				
	Day 60	<b>Weather Ch3-5: Quiz 2</b> • Page 97 • (LP)			



Date	Day	Assignment	Due Date	✓	Grade
Week 4	Day 61	Read Pages 48-53 • (WB)			
	Day 62				
	Day 63	Hurricanes-Words to Know, Questions 1-11 and Activities on <b>Weather Ch6: Worksheet 1</b> • Page 49 • (LP)			
	Day 64				
	Day 65	Read Pages 54-59 • (WB)			
Week 5	Day 66	Winter Storms-Words to Know, Questions 1-11 and Activities on <b>Weather Ch7: Worksheet 1</b> • Page 51 • (LP)			
	Day 67				
	Day 68	<b>Weather Ch6-7: Quiz 3</b> • Page 99 • (LP)			
	Day 69				
	Day 70	Read Pages 60-63 • (WB)			
Week 6	Day 71	Wild Weather-Words to Know, Questions 1-9 on <b>Weather Ch8: Worksheet 1</b> • Page 53 • (LP)			
	Day 72				
	Day 73	Read Pages 64-67 • (WB)			
	Day 74				
	Day 75	Climate in the Past-Questions 1-6 on <b>Weather Ch9: Worksheet 1</b> • Page 55 • (LP)			
Week 7	Day 76	Read Pages 68-69 • (WB)			
	Day 77				
	Day 78	The Ice Age-Words to Know, Questions 1-3 on <b>Weather Ch9: Worksheet 2</b> • Page 57 • (LP)			
	Day 79				
	Day 80	Read Pages 70-73 • (WB)			
Week 8	Day 81	Future Climate-Words to Know, Questions 1-6 on <b>Weather Ch10: Worksheet 1</b> • Page 59 • (LP)			
	Day 82				
	Day 83	Read Pages 74-77 • (WB)			
	Day 84				
	Day 85	Observing Weather-Words to Know, Activities on <b>Weather Ch11: Worksheet 1</b> • Page 61 • (LP)			
Week 9	Day 86	Read Pages 78-79 • (WB)			
	Day 87				
	Day 88	God, Creation, and You-Questions 1-3 on <b>Weather Ch12: Worksheet 1</b> • Page 63 • (LP)			
	Day 89				
	Day 90	<b>Weather Ch8-12: Quiz 4</b> • Page 101 • (LP)			
		Semester Exam (optional)			
		Mid-Term Grade			



## Second Semester Suggested Daily Schedule

Date	Day	Assignment	Due Date	✓	Grade
Second Semester-Third Quarter — <i>The Astronomy Book</i>					
Week 1	Day 91	The Astronomy Book Intro. • (AB) <b>Astronomy Intro: Worksheet 1</b> • Page 67 • (LP)			
	Day 92				
	Day 93	Read Pages 6-7 • The Astronomy Book • (AB)			
	Day 94				
	Day 95	What is Astronomy?-Words to Know on <b>Astronomy Ch1: Worksheet 1</b> • Page 69 • (LP)			
Week 2	Day 96	What is Astronomy?-Questions on <b>Astronomy Ch1: Worksheet 1</b> • Page 69 • (LP)			
	Day 97				
	Day 98	What is Astronomy?-Activities on <b>Astronomy Ch1: Worksheet 1</b> • Page 70 • (LP)			
	Day 99				
	Day 100	Read Pages 8-13 • (AB)			
Week 3	Day 101	How Big is the Universe?-Words to Know on <b>Astronomy Ch2: Worksheet 1</b> • Page 71 • (LP)			
	Day 102				
	Day 103	How Big is the Universe?-Question on <b>Astronomy Ch2: Worksheet 1</b> • Page 71 • (LP)			
	Day 104				
	Day 105	How Big is the Universe?-Activities on <b>Astronomy Ch2: Worksheet 1</b> • Page 71 • (LP)			
Week 4	Day 106	Read Pages 14-17 • (AB)			
	Day 107				
	Day 108	The Origin of the Universe-Words to Know on <b>Astronomy Ch3: Worksheet 1</b> • Page 73 • (LP)			
	Day 109				
	Day 110	The Origin of the Universe-Questions 1-2 on <b>Astronomy Ch3: Worksheet 1</b> • Page 73 • (LP)			
Week 5	Day 111	The Origin of the Universe--Questions 3-5 on <b>Astronomy Ch3: Worksheet 1</b> • Page 74 • (LP)			
	Day 112				
	Day 113	<b>Astronomy Ch1-3: Quiz 1</b> • Page 107 • (LP)			
	Day 114				
	Day 115	Read Pages 18-21 • (AB)			
Week 6	Day 116	Watching the Sky-Words to Know on <b>Astronomy Ch4: Worksheet 1</b> • Page 75 • (LP)			
	Day 117				
	Day 118	Watching the Sky-Questions on <b>Astronomy Ch4: Worksheet 1</b> • Page 75 • (LP)			
	Day 119				
	Day 120	Watching the Sky-Activities on <b>Astronomy Ch4: Worksheet 1</b> • Page 76 • (LP)			

Date	Day	Assignment	Due Date	✓	Grade
Week 7	Day 121	Read Pages 22-27 • (AB)			
	Day 122				
	Day 123	Why Did God Create...?-Words to Know on <b>Astronomy Ch5: Worksheet 1</b> • Page 77 • (LP)			
	Day 124				
	Day 125	Why Did God Create...?-Questions on <b>Astronomy Ch5: Worksheet 1</b> • Page 77 • (LP)			
Week 8	Day 126	Why Did God Create...?-Activities on <b>Astronomy Ch5: Worksheet 1</b> • Page 78 • (LP)			
	Day 127				
	Day 128	Read Pages 28-35 • (AB)			
	Day 129				
	Day 130	Space Exploration-Words to Know on <b>Astronomy Ch6: Worksheet 1</b> • Page 79 • (LP)			
Week 9	Day 131	Space Exploration-Questions on <b>Astronomy Ch6: Worksheet 1</b> • Page 79 • (LP)			
	Day 132				
	Day 133	Space Exploration-Activities on <b>Astronomy Ch6: Worksheet 1</b> • Page 80 • (LP)			
	Day 134				
	Day 135	<b>Astronomy Ch4-6: Quiz 2</b> • Page 109 • (LP)			
Second Semester-Fourth Quarter — <i>The Astronomy Book</i>					
Week 1	Day 136	Read Pages 36-42 • (AB)			
	Day 137				
	Day 138	Read Pages 43-49 • (AB)			
	Day 139				
	Day 140	A Tour of the Solar System-Words to Know, Questions on <b>Astronomy Ch7: Worksheets 1</b> • Pages 81 • (LP)			
Week 2	Day 141	A Tour of the Solar System-Activities on <b>Astronomy Ch7: Worksheet 1</b> • Page 82 • (LP)			
	Day 142				
	Day 143	A Tour of the Solar System-Words to Know, Questions on <b>Astronomy Ch7: Worksheet 2</b> • Page 83 • (LP)			
	Day 144				
	Day 145	A Tour of the Solar System-Activities on <b>Astronomy Ch7: Worksheets 2</b> • Page 84 • (LP)			
Week 3	Day 146	Read Pages 50-55 • (AB)			
	Day 147				
	Day 148	Stars and Galaxies-Words to Know on <b>Astronomy Ch8: Worksheet 1</b> • Page 85 • (LP)			
	Day 149				
	Day 150	Stars and Galaxies-Questions on <b>Astronomy Ch8: Worksheet 1</b> • Page 85 • (LP)			

Date	Day	Assignment	Due Date	✓	Grade
Week 4	Day 151	Stars and Galaxies-Activities on <b>Astronomy Ch8: Worksheet 1</b> • Page 86 • (LP)			
	Day 152				
	Day 153	<b>Astronomy Ch7-8: Quiz 3</b> • Page 111 • (LP)			
	Day 154				
	Day 155	Read Pages 56-59 • (AB)			
Week 5	Day 156	Cosmic Catastrophes-Words to Know on <b>Astronomy Ch9: Worksheet 1</b> • Page 87 • (LP)			
	Day 157				
	Day 158	Cosmic Catastrophes-Questions on <b>Astronomy Ch9: Worksheet 1</b> • Page 87 • (LP)			
	Day 159				
	Day 160	Cosmic Catastrophes-Activities on <b>Astronomy Ch9: Worksheet 1</b> • Page 88 • (LP)			
Week 6	Day 161	Read Pages 60-65 • (AB)			
	Day 162				
	Day 163	Read Pages 66-71 • (AB)			
	Day 164				
	Day 165	Catastrophes in the Solar...-Words to Know on <b>Astronomy Ch10: Worksheet 1</b> • Page 89 • (LP)			
Week 7	Day 166	Catastrophes in the Solar...-Questions on <b>Astronomy Ch10: Worksheet 1</b> • Page 89 • (LP)			
	Day 167				
	Day 168	Catastrophes in the Solar...-Activities on <b>Astronomy Ch10: Worksheet 1</b> • Page 90 • (LP)			
	Day 169				
	Day 170	Read Pages 72-75 • (AB)			
Week 8	Day 171	Are There Other Planets...?-Words to Know on <b>Astronomy Ch11: Worksheet 1</b> • Page 91 • (LP)			
	Day 172				
	Day 173	Are There Other...?-Questions on <b>Astronomy Ch11: Worksheet 1</b> • Page 91 • (LP)			
	Day 174				
	Day 175	Are There Other Planets...?-Activities on <b>Astronomy Ch11: Worksheet 1</b> • Page 92 • (LP)			
Week 9	Day 176	<b>Astronomy Ch9-11: Quiz 4</b> • Page 113 • (LP)			
	Day 177				
	Day 178	The Astronomy Book Study Day			
	Day 179				
	Day 180	Semester Exam on page 115			
		Final Grade			

## **Suggested Optional Science Lab**

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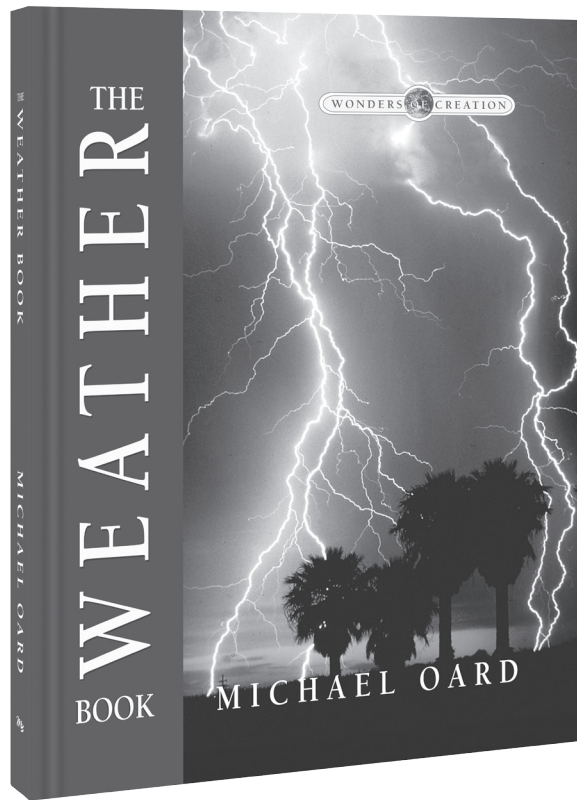
There are a variety of companies that offer science labs that complement our courses. These items are only suggestions, not requirements, and they are not included in the daily schedule. We have tried to find materials that are free of evolutionary teaching, but please review any materials you may purchase.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

### *The Weather Book*

KT-WESTUDY Weather Study Kit

### *The Astronomy Book*

KT-SPACEXP Space Exploration Kit



**Meteorology Worksheets**

**for Use with**

***The Weather Book***



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## Words to Know

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atmosphere

climate

blizzard

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## Questions

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1. Name three ways that weather can affect our daily lives.

a.

b.

c.

2. Paul says, “All things were created by God, things in heaven and on earth, visible and invisible” (Colossians 1:16). Can you think of something invisible that is related to the weather?

3. Why does God allow dangerous weather?

4. Explain how the order of God's creation helps us to predict the weather.