

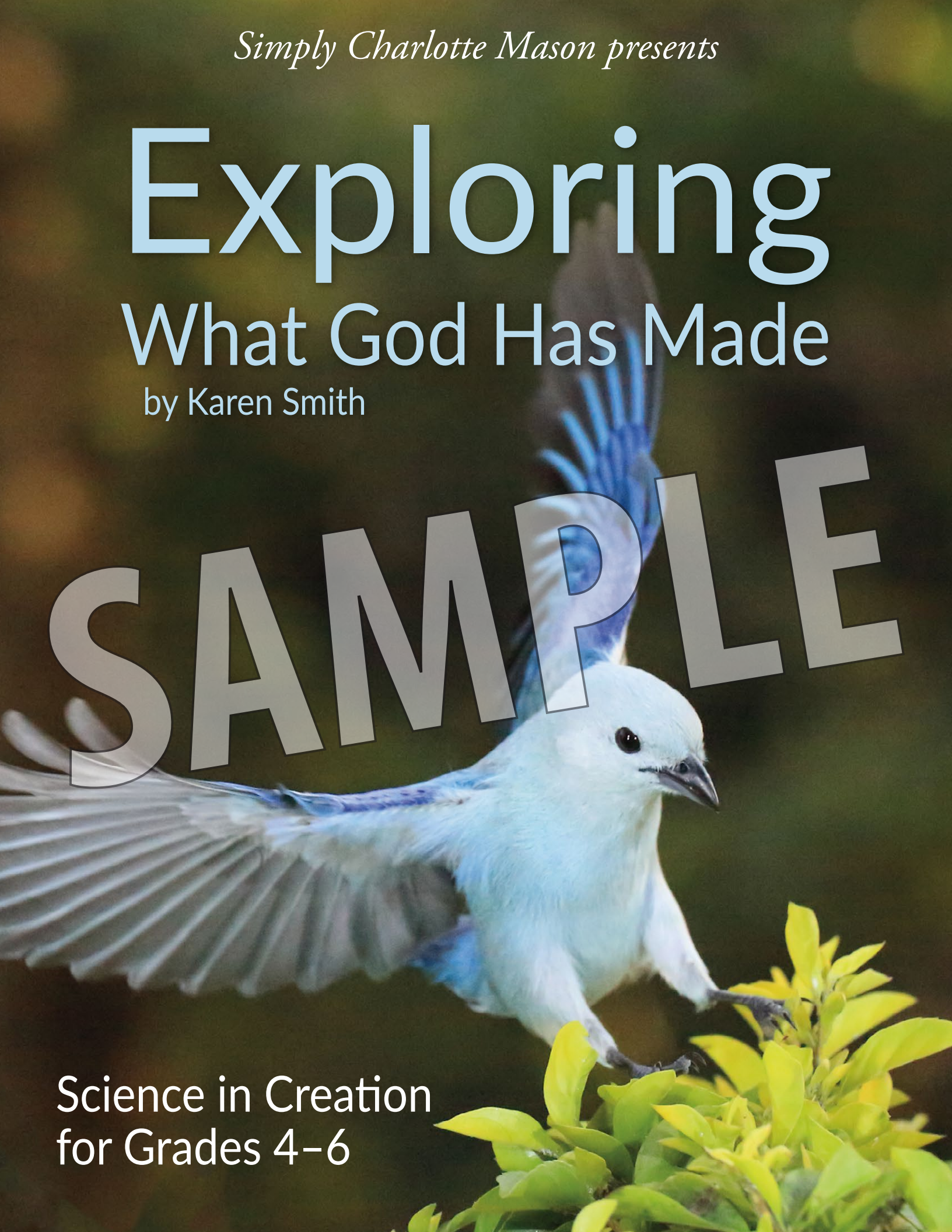
Simply Charlotte Mason presents

Exploring What God Has Made

by Karen Smith

SAMPLE

Science in Creation
for Grades 4-6



Explore the miraculous variety of what God has made in Creation!

Dig deeper into fascinating general science topics that relate to each day of Creation. Through great living science books, helpful experiments, nature study projects, and a personal Creation notebook, your child will explore light, weather, water, rocks and minerals, plants, space, aquatic life, winged creatures, creeping things, land animals, and the human body. Complete the study with your student or assign portions for independent work.

Exploring What God Has Made will

- Nurture within your child a sense of wonder at God's Creation,
- Cultivate a habit of careful observation that will serve your child well, and
- Lay the ground work of personal experience that will support future science studies.

“O Lord, how manifold are your works! In wisdom have you made them all . . .” (Psalm 104:24).

Note: *Exploring What God Has Made* (for grades 4–6) elaborates and expands on many of the science topics that were introduced in *Discovering What God Has Made* (for grades 1–3) but features different animals, birds, insects, and plants, as well as a different schedule. Your student can enjoy either or both of these living science studies.

Simply
Charlotte Mason
.com

Exploring What God Has Made

Science in Creation for Grades 4–6

by Karen Smith

Exploring What God Has Made: Science in Creation for Grades 4–6
© 2021 by Karen Smith

All rights reserved. However, we grant permission to make printed copies or use this work on multiple electronic devices for members of your immediate household. Quantity discounts are available for classroom and co-op use. Please contact us for details.

ISBN 978-1-61634-502-0 printed
ISBN 978-1-61634-503-7 electronic download

Published by
Simply Charlotte Mason, LLC
930 New Hope Road #11-892
Lawrenceville, Georgia 30045
simplycharlottemason.com

Printed by PrintLogic, Inc.
Monroe, Georgia, USA

Contents

Introduction.....	7
A Word about Nature Notebooks.....	8
Note to Parents.....	9
Resources Needed: Complete List.....	11
Resources Needed: By Term.....	15
Suggested Schedule for a Year of Study.....	19
Lesson 1: God Created.....	21
Lesson 2: The Seven Days of Creation.....	21
Lesson 3: Creation and Evolution.....	21
Lesson 4: Creation and Evolution, cont.....	22
Lesson 5: Day One of Creation: Light.....	24
Lesson 6: Light.....	24
Lesson 7: Day Two of Creation: Separation of Waters and Atmosphere.....	25
Lesson 8: Clouds.....	25
Lesson 9: Precipitation and Storms.....	26
Lesson 10: Wind, Fog, Frost, and Sky Color.....	27
Lesson 11: Rainbows, Sundogs, and Haloes.....	27
Lesson 12: Snowflakes.....	28
Lesson 13: Properties of Water.....	28
Lesson 14: More Properties of Water.....	29
Weather Calendar.....	30
Lesson 15: Oceans.....	32
Lesson 16: Day Three of Creation: Land and Plants.....	32
Lesson 17: Geology.....	32
Lesson 18: Igneous Rocks.....	34
Lesson 19: Sedimentary Rock.....	34
Lesson 20: Metamorphic Rock.....	35
Lesson 21: Minerals.....	35
Lesson 22: More Minerals.....	36
Lesson 23: Diamonds and Metals.....	36
Lesson 24: Oxides, Salts, and More.....	36
Lesson 25: Silicates.....	37
Lesson 26: Plants.....	37
Lesson 27: Trees.....	38
Lesson 28: More Trees.....	38
Lesson 29: And More Trees.....	38
Lesson 30: And Even More Trees.....	39
Lesson 31: Alexander von Humboldt.....	39
Lesson 32: Botanists.....	40
Lesson 33: Classification.....	40
Lesson 34: Catch Up or Exam.....	40

Lesson 35: Catch Up or Exam	41
Lesson 36: Catch Up or Exam	41
Lesson 37: Joseph Hooker	41
Lesson 38: The Dangers in Plant Hunting	41
Lesson 39: Stealing Plants	42
Lesson 40: Modern Botanists	42
Lesson 41: Day Four of Creation: Sun, Moon, and Stars	43
Lesson 42: The Sun	43
Lesson 43: The Solar System	43
Lesson 44: Man on the Moon	45
Lesson 45: Space Exploration	45
Lesson 46: Day Five of Creation: Aquatic Life and Winged Creatures	46
Lesson 47: Whales	46
Lesson 48: More on Whales	46
Lesson 49: Giant Squid	47
Lesson 50: More about the Giant Squid	47
Lesson 51: The Development of a Hermit Crab	48
Lesson 52: Mussels, Starfish, and Barnacles	48
Lesson 53: A Hermit Crab Finds a House	49
Lesson 54: Anemones	49
Lesson 55: Another Type of Crab	49
Lesson 56: Dangers for Hermit Crabs	50
Lesson 57: The Octopus	50
Lesson 58: Aquarium Field Trip	50
Lesson 59: Plovers	51
Lesson 60: Eagles, Hawks, Owls, and Vultures	52
Lesson 61: Herons, Egrets, Pelicans, Loons, and Cormorants	52
Lesson 62: Roger Tory Peterson	52
Lesson 63: Birds and Flight	53
Lesson 64: Day Six of Creation: Land Animals, Creeping Things, and Man	53
Lesson 65: Earthworms	53
Lesson 66: Roundworms, Snails, and Slugs	54
Lesson 67: Slugs and Snails	55
Lesson 68: Wood Lice, Centipedes, and Millipedes	55
Lesson 69: Centipedes and Millipedes, cont.	56
Lesson 70: Catch Up or Exam	56
Lesson 71: Catch Up or Exam	57
Lesson 72: Catch Up or Exam	57
Lesson 73: Springtails	57
Lesson 74: Spiders	57
Lesson 75: Mites and Beetles	58
Lesson 76: Ants	59
Lesson 77: Metamorphosis and Butterflies	59
Lesson 78: Bugs in Winter	60
Lesson 79: More Bugs in Winter	60

Lesson 80: Lizards.....	60
Lesson 81: More Lizards.....	61
Lesson 82: Frogs.....	61
Lesson 83: Strawberry Dart Frogs.....	62
Lesson 84: Vernal Pools in Fall and Winter.....	62
Lesson 85: Vernal Pools in Spring.....	62
Lesson 86: Vernal Pools in Summer.....	63
Lesson 87: Snakes.....	63
Lesson 88: Garter Snakes.....	63
Lesson 89: The Snake Scientist.....	64
Lesson 90: Big Cats.....	64
Lesson 91: More Big Cats.....	65
Lesson 92: Opossums and Kangaroos.....	65
Lesson 93: Koalas, Possums, Wombats, and Tasmanian Devils.....	65
Lesson 94: Elephants.....	65
Lesson 95: Zoo Field Trip.....	66
Lesson 96: Man and Woman.....	66
Lesson 97: The Nervous System.....	66
Lesson 98: Eyes.....	67
Lesson 99: Ears.....	67
Lesson 100: The Digestive System.....	68
Lesson 101: The Circulatory System.....	68
Lesson 102: The Respiratory System.....	69
Lesson 103: The Skeletal System.....	70
Lesson 104: The Muscular System.....	71
Lesson 105: Day Seven of Creation: Rest.....	72
Lesson 106: Catch Up or Exam.....	73
Lesson 107: Catch Up or Exam.....	73
Lesson 108: Catch Up or Exam.....	73
Geology Pronunciation Guide.....	75
Anatomy Pronunciation Guide.....	79

Introduction

During the elementary years your science lessons should accomplish three things:

1. Nurture within the student a sense of wonder at God's creation;
2. Cultivate a habit of careful observation;
3. Lay the groundwork of personal experience that will support future science studies.

The lessons in this book strive to accomplish those three goals. They are intended for children in fourth, fifth, and sixth grades and are based on the seven days of Creation as recorded in the Bible. I have simply collected some additional ideas to encourage you and your student to explore more about the general science topics that relate to each day of Creation.

While both *Discovering What God Has Made* (for grades 1–3) and *Exploring What God Has Made* (for grades 4–6) are science courses based on the days of Creation, they are different. Your student can enjoy either course or both. *Discovering What God Has Made* does not need to be completed before doing *Exploring What God Has Made*. The two studies are independent of each other.

Exploring What God Has Made elaborates and expands on many of the science topics that were introduced in *Discovering What God Has Made* but features different animals, birds, insects, and plants.

If you have children in grades 1–3 and in grades 4–6 and want to use both *Discovering What God Has Made* and *Exploring What God Has Made* together, be aware that because of the deeper level of study in *Exploring What God Has Made*, the lessons for each day of Creation do not align between the two courses.

A Word about Nature Notebooks

Throughout the lessons in this book you will see references to a Creation notebook. A Creation notebook is simply a nature notebook that is focused on the days of Creation. I recommend a three-ring binder to be used for this study instead of a blank notebook, so there can be a divider for each day of Creation. The Creation notebook will become the student's own record of what he observed and made a personal relation with during this study.

Here are some key points to remember about a nature notebook.

1. A nature notebook is the student's own possession. It is not to be graded or critiqued. It is not the parent's project; it belongs to the student.
2. A nature notebook can contain written observations, drawings, poetry, Scripture, specimens—whatever interests the student and encourages him to look closely and observe nature carefully.
3. If the student isn't able to write or comfortable with writing his observations in his nature notebook, the parent can do the writing as the student dictates what he wants to say.

Choosing a Field Guide

Good field guides are an essential tool for doing nature study. They will help you identify plants, animals, insects, etc. in nature and give you some basic information about the natural item being studied. Choose field guides with good pictures, written descriptions of the organism, range maps, common names and Latin names, and a description of the habitat and basic habits of the organism. There are many choices available for field guides from regional books to digital apps. Choose the ones you will use and that will be the most useful to you.

Note to Parents

The lessons in this course are written to the child, so the older elementary student may begin to transition to more independent work as he is comfortable and able. You may determine which books you want to read aloud to your student and which you want to assign him to read independently.

Narration prompts are included in the lessons. The narration prompts are book specific and may need to be changed if you decide to substitute a different book for the one that is scheduled.

You may assign narrations to be given orally or in writing. Your student should place any written narrations he does in the appropriate day-of-Creation section of his Creation notebook. If you choose to have your student narrate orally for all or some of the narrations, I encourage you to write his oral narrations as he dictates, so they may be added to his Creation notebook. When discussing lessons with your student, be careful not to dominate the discussion, but allow your student time to think and add his thoughts to the discussion.

Handbook of Nature Study by Anna Botsford Comstock may be used as a parent reference book on various nature topics as desired. For your convenience, you will find page references for *Handbook of Nature Study* in the sidebar throughout this course. Also in the sidebar, you will find reminders to get books for upcoming lessons and a recommendation for full geology courses for all ages for those interested in learning more about geology. Book of Centuries dates are provided, too, in case you or your child wants to add scientists from this study to that timeline.

This course is written from a literal interpretation of Genesis 1: that God created the universe, the Earth, and everything in it in six literal 24-hour days. Some of the books used with this course contain references to evolution. You will find tips throughout the lessons to help you and your student read those books in a way that is in accordance with a literal interpretation of Genesis 1. You may disregard those tips if your family holds a different belief regarding how our world came into existence.

A suggested schedule is provided on page 19. Three 20-to-30-minute lessons are scheduled for each week to give children in grades 4–6 more depth in their science lessons and to help with transitioning them from science lessons twice a week for early elementary to five days a week for middle school and high school.

When doing experiments or nature study activities for this study, have your student write (or write for him while he dictates) about how the experiment was conducted and what he learned from it. Add his experiment notes to the appropriate day-of-Creation section in his Creation notebook. This practice will help to prepare him for doing lab reports in middle school and high school.

Please note that because this study follows the days of Creation, it is recommend that you do not rearrange the lessons to follow the seasons. There may be experiments or nature study activities that you cannot do when they are scheduled. Alternatives have been given whenever possible. Experiments and nature study activities that are scheduled in winter may be saved for warmer weather if necessary. When doing them at a later date, remind your student of the lessons they go with before doing them. Have your student add each one to its appropriate day-of-Creation section of his Creation notebook.

At the time of this publishing, all of the book and video suggestions listed in the lessons were in print. If you cannot find one of the titles, feel free to substitute a different book on the same topic. Likewise, all of the Internet links were working at the time of publishing. If an Internet link is no longer working, feel free to search for another one. Remember that the narration prompts in the lessons are book specific, so you may need to change them if you substitute different books or videos.

I hope that these lessons will cause your student to wonder at God's creation and will spark an interest in science!

Resources Needed

Complete List

Books used throughout the study

- Bible
- Dictionary
- Rocks & Minerals field guide
- Trees field guide
- (optional) Birds field guide
- Insects & Spiders field guide
- Reptiles & Amphibians field guide
- (optional) *Handbook of Nature Study* by Anna Botsford Comstock

Books for specific lessons (Check your library.)

- *All About Light and Sound (Physical Science Readers)* by Connie Jankowski
- *Exploring the Sky by Day: The Equinox Guide to Weather and the Atmosphere* by Terence Dickinson
- *The Secret Life of a Snowflake: An Up-Close Look at the Art and Science of Snowflakes* by Kenneth Libbrecht
- *A Drop of Water: A Book of Science and Wonder* by Walter Wick
- *Oceans* by Seymour Simon
- *Rocks, Minerals, and Gems* by John Farndon
- *Plant Reproduction: How Do You Grow a Giant Pumpkin? (Show Me Science)* by Cath Senker
- *The Tree Book for Kids and Their Grown-Ups* by Gina Ingoglia
- *The Plant Hunters: True Stories of Their Daring Adventures to the Far Corners of the Earth* by Anita Silvey
- *The Sun* by Seymour Simon
- *The Planets of Our Solar System* by Stephen John Kortenkamp
- *Look to the Stars* by Buzz Aldrin
- *A Pod of Killer Whales: The Mysterious Life of the Intelligent Orca* by Vicki León
- *Giant Squid: Searching for a Sea Monster* by Mary M. Cerullo
- *Pagoo* by Holling Clancy Holling
- *Kolea: The Story of the Pacific Golden Plover* by Marion Coste
- *Thunder Birds: Nature's Flying Predators* by Jim Arnosky
- *For the Birds: The Life of Roger Tory Peterson* by Peggy Thomas
- *Life in a Bucket of Soil* by Alvin Silverstein and Virginia Silverstein
- *Bugs and Bugsicles: Insects in the Winter* by Amy S. Hansen
- *Sneed B. Collard III's Most Fun Book Ever About Lizards* by Sneed B. Collard III

- *Face to Face with Frogs* by Mark W. Moffett
- *Frog Heaven: Ecology of a Vernal Pool* by Doug Wechsler
- *The Snake Scientist (Scientists in the Field)* by Sy Montgomery
- *Big Cats* by Nic Bishop
- *Marsupials* by Nic Bishop
- *Face to Face with Elephants* by Beverly and Dereck Joubert
- *The Brain: All About Our Nervous System and More!* by Seymour Simon
- *Eyes and Ears* by Seymour Simon
- *Guts: Our Digestive System (2006 Edition)* by Seymour Simon
- *The Heart: Our Circulatory System (Revised Edition)* by Seymour Simon
- *Lungs: All about Our Respiratory System and More!* by Seymour Simon
- *Bones: Our Skeletal System* by Seymour Simon
- *Muscles: Our Muscular System* by Seymour Simon

Videos for specific lessons

- *Flight: The Genius of Birds* from Illustra Media
- *Metamorphosis: The Beauty and Design of Butterflies* from Illustra Media
- (optional) *Spiders! Ogres, Allies & Architects* by Mike Snavely (available from Mission: Imperative at <https://www.missionimperative.org>)

Materials for narrations, experiments, and nature studies

- Blank paper
- Colored pencils
- Felt-tip markers
- Three-ring binder notebook, one for each student
- Pencil or pen
- Lined notebook paper
- Internet-connected computer
- Construction paper or other colored paper
- Clear drinking glass or clear glass jar
- Drinking straw or pencil
- Water
- Garden hose
- Spray nozzle attachment for garden hose
- Food coloring
- Cookie sheet
- Spray bottle
- Assortment of rocks
- Pocket microscope
- Magnifying glass

- Various flowers, such as a dandelion, rose, lily, and daisy
- At least a dozen various nature items, such as leaves, plants, nuts, fruit, and flowers
- Tape
- Bird feeder
- Black oil sunflower seeds
- (optional) Other bird food, such as Nyger (thistle) seeds, suet, unsalted peanuts, or hummingbird nectar (sugar water)
- (optional) Bird bath or shallow dish
- (optional) Fishing bait worms
- Garden trowel
- Sturdy, clear plastic, 16-oz. or 20-oz. bottle
- Box cutter or utility knife
- Two round balloons
- Scissors
- Rubber bands
- Drinking straw
- Modeling clay
- Three sheets (8.5" x 11") of card stock or other thin cardboard
- Hole punch
- Paperclip
- Two long balloons

Resources Needed

By Term

Lessons 1–36

Books

- Bible
- Dictionary
- *All About Light and Sound (Physical Science Readers)* by Connie Jankowski
- *Exploring the Sky by Day: The Equinox Guide to Weather and the Atmosphere* by Terence Dickinson
- *The Secret Life of a Snowflake: An Up-Close Look at the Art and Science of Snowflakes* by Kenneth Libbrecht
- *A Drop of Water: A Book of Science and Wonder* by Walter Wick
- *Oceans* by Seymour Simon
- *Rocks, Minerals and Gems* by John Farndon
- (optional) *Handbook of Nature Study* by Anna Botsford Comstock
- Rocks and Minerals field guide
- *Plant Reproduction: How Do You Grow a Giant Pumpkin? (Show Me Science)* by Cath Senker
- *The Tree Book for Kids and Their Grown-Ups* by Gina Ingoglia
- Trees field guide
- *The Plant Hunters: True Stories of Their Daring Adventures to the Far Corners of the Earth* by Anita Silvey

Materials

- Blank paper
- Colored pencils
- Felt-tip markers
- Three-ring binder notebook, one for each student
- Pencil or pen
- Lined notebook paper
- Internet-connected computer
- Construction paper or other colored paper
- Clear drinking glass or clear glass jar
- Drinking straw or pencil
- Water
- Garden hose
- Spray nozzle attachment for garden hose
- Food coloring
- Cookie sheet

- Spray bottle
- Assortment of rocks
- Pocket microscope or magnifying glass
- Various flowers, such as a dandelion, rose, lily, and daisy
- At least a dozen various nature items, such as leaves, plants, nuts, fruit, and flowers

Lessons 37–72

Books and Videos

- *The Plant Hunters: True Stories of Their Daring Adventures to the Far Corners of the Earth* by Anita Silvey
- Bible
- *The Sun* by Seymour Simon
- *The Planets of Our Solar System* by Stephen John Kortenkamp
- *Look to the Stars* by Buzz Aldrin
- *A Pod of Killer Whales: The Mysterious Life of the Intelligent Orca* by Vicki León
- *Giant Squid: Searching for a Sea Monster* by Mary M. Cerullo
- *Pagoo* by Holling Clancy Holling
- *Kolea: The Story of the Pacific Golden Plover* by Marion Coste
- *Thunder Birds: Nature's Flying Predators* by Jim Arnosky
- (optional) Birds field guide
- *For the Birds: The Life of Roger Tory Peterson* by Peggy Thomas
- *Flight: the Genius of Birds* video from Illustra Media
- *Life in a Bucket of Soil* by Alvin Silverstein and Virginia Silverstein
- (optional) *Handbook of Nature Study* by Anna Botsford Comstock

Materials

- Blank paper
- (optional) Construction paper or other colored paper
- Colored pencils
- (optional) Felt-tip markers
- Creation notebook created in lesson 1
- Tape
- Internet-connected computer
- Bird feeder of your choice
- Black oil sunflower seeds
- (optional) Other bird food, such as Nyger (thistle) seeds, suet, unsalted peanuts, or hummingbird nectar (sugar water)
- (optional) Bird bath or shallow dish
- Magnifying glass
- (optional) Fishing bait worms

- Garden trowel
- Pocket microscope

Lessons 73–108

Books and Videos

- *Life in a Bucket of Soil* by Alvin Silverstein and Virginia Silverstein
- Insects and Spiders field guide
- (optional) *Handbook of Nature Study* by Anna Botsford Comstock
- (optional) *Spiders! Ogres, Allies & Architects* video by Mike Snavelly (available from Mission: Imperative at <https://www.missionimperative.org>)
- *Metamorphosis: The Beauty and Design of Butterflies* video from Illustra Media
- *Bugs and Bugsicles: Insects in the Winter* by Amy S. Hansen
- *Snead B. Collard III's Most Fun Book Ever About Lizards* by Snead B. Collard III
- Reptiles & Amphibians field guide
- *Face to Face with Frogs* by Mark W. Moffett
- *Frog Heaven: Ecology of a Vernal Pool* by Doug Wechsler
- *The Snake Scientist (Scientists in the Field)* by Sy Montgomery
- *Big Cats* by Nic Bishop
- *Marsupials* by Nic Bishop
- *Face to Face with Elephants* by Beverly and Dereck Joubert
- Bible
- *The Brain: All About Our Nervous System and More!* by Seymour Simon
- *Eyes and Ears* by Seymour Simon
- *All About Light and Sound (Physical Science Readers)* by Connie Jankowski
- *Guts: Our Digestive System (2006 Edition)* by Seymour Simon
- *The Heart: Our Circulatory System (Revised Edition)* by Seymour Simon
- *Lungs: All about Our Respiratory System and More!* by Seymour Simon
- *Bones: Our Skeletal System* by Seymour Simon
- *Muscles: Our Muscular System* by Seymour Simon
- Dictionary

Materials

- Magnifying glass
- Blank paper
- Colored pencils
- Creation notebook created in lesson 1
- Pencil
- Lined notebook paper
- (optional) Pocket microscope
- Internet-connected computer

- Tape
- Sturdy, clear plastic, 16-oz. or 20-oz. bottle
- Box cutter or utility knife
- Two round balloons
- Scissors
- Rubber bands
- Drinking straw
- Modeling clay
- Three sheets (8.5" x 11") of card stock or other thin cardboard
- Hole punch
- Paperclip
- Two long balloons

Suggested Schedule for a Year of Study

Week 1: Lessons 1, 2, 3

Week 2: Lessons 4, 5, 6

Week 3: Lessons 7, 8, 9

Week 4: Lessons 10, 11, 12

Week 5: Lessons 13, 14, 15

Week 6: Lessons 16, 17, 18

Week 7: Lessons 19, 20, 21

Week 8: Lessons 22, 23, 24

Week 9: Lessons 25, 26, 27

Week 10: Lessons 28, 29, 30

Week 11: Lessons 31, 32, 33

Week 12: Catch Up or Exam Lessons 34, 35, 36

Week 13: Lessons 37, 38, 39

Week 14: Lessons 40, 41, 42

Week 15: Lessons 43, 44, 45

Week 16: Lessons 46, 47, 48

Week 17: Lessons 49, 50, 51

Week 18: Lessons 52, 53, 54

Week 19: Lessons 55, 56, 57

Week 20: Lessons 58, 59, 60

Week 21: Lessons 61, 62, 63

Week 22: Lessons 64, 65, 66

Week 23: Lessons 67, 68, 69

Week 24: Catch Up or Exam Lessons 70, 71, 72

Week 25: Lessons 73, 74, 75

Week 26: Lessons 76, 77, 78

Week 27: Lessons 79, 80, 81

Week 28: Lessons 82, 83, 84

Week 29: Lessons 85, 86, 87

Week 30: Lessons 88, 89, 90

Week 31: Lessons 91, 92, 93

Week 32: Lessons 94, 95, 96

Week 33: Lessons 97, 98, 99

Week 34: Lessons 100, 101, 102

Week 35: Lessons 103, 104, 105

Week 36: Catch Up or Exam Lessons 106, 107, 108

Lesson 1: God Created

Materials Needed

- Blank paper
- Colored pencils or felt-tip markers
- Three-ring binder, one for each student

Creation Notebook: Design a cover for your Creation notebook. Put your designed cover into a three-ring binder notebook, which will be your Creation notebook for this study. You will add to your notebook as the study progresses.

Lesson 2: The Seven Days of Creation

Materials Needed

- Bible
- Blank paper
- Colored pencils
- Creation notebook

Reading: Read Genesis 1:1—2:3.

Narration: Tell all you know about God’s creation of the world. Include in your telling the order in which things were created.

Creation Notebook: Draw what God made. You may draw on seven different sheets of paper to represent the seven days, draw seven circles on one paper (one for each day), or draw however you would like to represent the seven days. Add the drawings to your Creation notebook.

Lesson 3: Creation and Evolution

Materials Needed

- Bible
- Dictionary
- Pencil or pen
- Lined notebook paper
- Creation notebook

Evolution is a topic you should learn more about when you are older, but for now, let’s take a brief look at what evolution is and how it compares to what the Bible says about how our world came to be.

Notes

Reminder: Get All About Light and Sound (Physical Science Readers) by Connie Jankowski for lesson 6 and Exploring the Sky by Day: The Equinox Guide to Weather and the Atmosphere by Terence Dickinson for lessons 8–11.

Notes

Research: You may have heard the words “evolution” and “evolve” used in nature videos, other television programs, or in books and magazines. Use a dictionary to define the following words. Write out the definitions on notebook paper.

- Creation
- Evolution
- Theory

Reading: Read the following Bible verses. Write the Scripture references on notebook paper and record what you learn from each passage about the Creation of the world.

- Isaiah 45:18
- Exodus 20:11
- Psalm 33:6–9
- John 1:1–3
- Hebrews 11:3
- Revelation 4:11

Creation Notebook: Add your definitions of evolution, Creation, and theory and your findings from the Scripture references to your Creation notebook.

Lesson 4: Creation and Evolution, cont.

Materials Needed

- Internet-connected computer

Reading: Read this brief overview of evolution and the abbreviated evolutionary line for humans.

Evolution is the theory that our solar system, the earth, the plants, the animals, and man came into being over billions of years. Evolutionists believe that over billions of years, bits of non-living matter came together and formed living things. They believe that every living thing has a common ancestor that formed as a simple living organism billions of years ago. That organism then mutated and formed other more complex organisms. Eventually, the organisms became even more complex until all of the life we see today came into being.

The following is an abbreviated evolutionary line for humans from the first life appearing on Earth to the first human-like creature.

- 4.1 billion years ago, earliest life appeared.
- 3.9 billion years ago, cells appeared.
- 3.5 billion years ago, plants (organisms that photosynthesize) appeared.

Lesson 53: A Hermit Crab Finds a House

Materials Needed

- *Pagoo*

Review: What do you remember from last time's reading about Pagoo's encounters with mussels, starfish, and barnacles?

Reading: Read chapters 8–10 in *Pagoo* by Holling Clancy Holling.

Narration: Tell of the dangers that Pagoo encountered as he was looking for the right home.

Lesson 54: Anemones

Materials Needed

- *Pagoo*

Review: What do you remember from last time's reading about Pagoo's adventures looking for the right home?

Reading: Read chapters 11–13 in *Pagoo* by Holling Clancy Holling.

Narration: Tell all you know about anemones.

Lesson 55: Another Type of Crab

Materials Needed

- *Pagoo*

Review: What do you remember from last time's reading about Pagoo's encounter with anemones?

Reading: Read chapters 14 and 15 in *Pagoo* by Holling Clancy Holling.

Narration: Tell all you know about the "Decorator Crab."

Notes

Reminder: Get Kolea: The Story of the Pacific Golden Plover by Marion Coste for lesson 59 and Thunder Birds: Nature's Flying Predators by Jim Arnosky for lessons 60 and 61.