



God Made **ANIMALS**

Science/Worldview | 4-6 Grade

Author: Kevin Swanson, BS, Mechanical Engineering, California Polytechnic State University, San Luis Obispo, CA, M.Div., Southern California Center for Christian Studies

Editors: Tamela Sechrist, Daniel Noor, Joshua Schwisow, Kayla White



Generations
PASSING ON THE FAITH

Copyright © 2019 by Generations. All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

2nd Edition, 1st Printing, 2025.

Printed in the United States of America.

ISBN: 978-1-7332304-1-4

Cover Design and Interior Design: Turley and Sons Design Co.

Published by:
Generations
PO Box 1398
Elizabeth, CO 80107
Generations.org

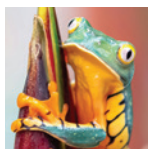
Unless otherwise noted, Scripture taken from the New King James Version®.
Copyright © 1982 by Thomas Nelson. Used by permission. All rights reserved.

For more information on this and other titles from Generations,
visit Generations.org or call (888) 389-9080.

TABLE OF CONTENTS



Introduction7



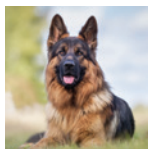
Chapter 1

Science from a Biblical Worldview.....11



Chapter 2

God's Amazing Creative Power.....21



Chapter 3

God Made Animals.....29



Chapter 4

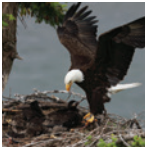
Animals Without Backbones41



Chapter 5
How Insects Serve God and His Creation79



Chapter 6
God Made Birds.....101



Chapter 7
God’s Awe-Inspiring Designs for Bird Function.....113



Chapter 8
God’s Command to Rule Over the Birds137



Chapter 9
God Made Fish155



Chapter 10
God Designed Fish for a Purpose171



Chapter 11
Taking Dominion Over the Fish.....183



Chapter 12

God Made Amphibians.....193



Chapter 13

God Made Reptiles207



Chapter 14

God Made Both Great and Small Reptiles225



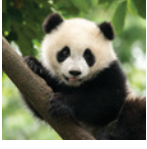
Chapter 15

God Made Mammals239



Chapter 16

Taking Dominion Over the Mammal World277



Notes305

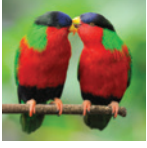


Image Credits309





INTRODUCTION



This course will represent a paradigm shift in the way that the student understands science. A biblical worldview perspective of science always puts God at the center. The purpose of science is to enjoy God in the context of His creation and praise Him for His marvelous works.

Thus, this course will provide devotional reading in many Scriptures throughout as we introduce the animal creation to the students. There will be many opportunities provided for prayer and singing of praise. These elements are core to a Christian view of science. As the teacher/parent disciples the child in the study of science, we hope the student develops a Godward view of science and all of life.

If education will be truly effective, the student must be well aware of the purpose of the study throughout. Hardly a page of the text should go by without the student realizing the high significance and purpose of the study. For the Christian, the purpose of science is absolutely clear. It is for praise

and dominion. We glory in God's nature and His works, and we seek to fulfill our role in ruling over the natural world (as the Lord commanded man to do at the beginning).

If there is a clear integration of praise and life application on every page, the material will be much better retained. The perpetual spewing of disconnected and purposeless facts in education does little for retention. When science is given meaning and purpose on every page, the student will be much more likely to retain the material and apply it in a meaningful way in his life.

There must be an integration of the material the student is learning into real life. Great efforts have been taken to provide suggestions on how this might be done. Laboratory work and experiments are interesting and helpful, but they are not enough. The student must find ways to take the scientific knowledge he has picked up and apply it to his own life, to his own home and garden, and to his own community.

For the budding young student of creation, this introductory material presents science from a biblical worldview in the most winsome way possible. Contained in this short survey of animal biology is an astounding collection of the most amazing specimens of God's creative genius. It is therefore fitting that Scripture be integrated throughout to rightly interpret the science, and to inculcate a spirit of wonder and praise in all who study it. Prayers of praise and hymns will play an important part in the course. Critical elements of the biblical worldview in the scientific field are laid out to counter the false view of science that has become increasingly destructive in the

blooded animals, cold-blooded animals, and insects. That includes the marvelous bombardier beetle, the amazing butterfly, the phenomenal world of spiders, the sometimes life-threatening mosquito, the ambitious dung beetle, the startling, talented spotted puffer fish, the ever-present house fly, the other-worldly silkworm, the highly coordinated honeybees, the surprisingly intelligent octopus, the magical world of jellyfish, the oddly cute and hearty Antarctic penguin, the universally beneficial chicken, the clever crow, the resourceful beaver, the remarkable hermit crab, and a hundred other amazing creatures designed and formed by the Hand of God.



This survey will also include an introduction to genetics, taxonomy, the basics of bird flight, animal social behavior, symbiotic relationships, and animal domestication. To add relevance and purpose to the seeking out of knowledge, each chapter will include several projects where the student can make real-life applications at home or in the field. The student will be encouraged to take up their God-given responsibility to rule over the insects, birds, fish, and domesticated animals. These are the essential elements for any proper study of science, from a biblical perspective.

The first and foremost goal of this study is to inspire wonder and excitement in our young readers to pursue further exploration of God's creation. But all so as to find more reasons to glorify God and to live in constant awe and praise for His goodness, wisdom, and power!

The works of the Lord are great,
Studied by all who have pleasure in them.
His work is honorable and glorious,
And His righteousness endures forever.
He has made His wonderful works to be
remembered; (Psalm 111:3-4)





Chapter 1

SCIENCE FROM A BIBLICAL WORLDVIEW

The four and twenty elders fall down before him that sat on the throne, and worship him that liveth for ever and ever, and cast their crowns before the throne, saying, Thou art worthy, O Lord, to receive glory and honour and power: for thou hast created all things, and for thy pleasure they are and were created. (Revelation 4:10-11, KJV)

Science is the study of God's created world. When we study God's world, we are looking at how God does things.

Henry Ford built one of the first cars over one hundred years ago. If you were to take apart Henry Ford's first car and look at each piece of it, you would learn something about Henry Ford.

Our God has made this world all around us. When we study the sun, the stars, the rivers, the oceans, the trees, the plants, and the animals, we learn something about God.

More than anyone else, Christians should be eager to study science. The greatest scientists in the past have been Christians. It



Sir Isaac Newton (1642-1727)

is these men and women who have made the most progress in good and helpful fields of science through the years. The following is a short list:

Bacteriology

Louis Pasteur (1822-1895)

Calculus

Isaac Newton (1642-1727)

Chemistry

Robert Boyle (1627-1691)

Computer Science

Charles Babbage (1792-1871)

Dynamics

Isaac Newton (1642-1727)

Electrodynamics

James Clerk Maxwell (1831-1879)

Electromagnetics

Michael Faraday (1791-1867)

Electronics

John Fleming (1849-1945)

Fluid Mechanics

George Stokes (1819-1903)

Physical Astronomy

Johannes Kepler (1571-1630)

Thermodynamics

Lord Kelvin (1824-1907)

Systematic Biology

Carolus Linnaeus (1707-1778)

Science taught by worldly-minded people is very different from science taught by Christians. We look at science differently in the following ways:

1. Christians believe that God is the cause of everything in the universe. When you see a beautiful sunset, you need to see this as God's handiwork. When your dog gives birth to a litter of eight little puppies, you need to see this as a work of God too.

Unbelieving scientists do not believe that God created the world. They do not believe that God's hand is still involved in all of His creation. That is why they would reject the possibility of miracles.

The unbelieving scientist does not believe that a personal God made the world. He thinks it is all an accident. And so he studies the world like an ant walking across a painting. He does not see the beauty of it and the wonder of it. If the



A Litter of Puppies



Carolus Linnaeus (1707-1778)

creation is an accident, like spilled milk on a floor, then there is no beauty in it. Science becomes boring when there is no personal God who has made all these things.

2. As Christians, we believe that we are not the first to learn this knowledge. We are only learning things that God has known all along. God knows everything, and we do not know very much. He is the original Teacher, and He shares His knowledge with us through creation.
3. From Scripture we also learn that God has hidden things in the world for us to discover.



Sunset in Hawaii

It is the glory of God to conceal a matter,
but the glory of kings is to search out a
matter. (Proverbs 25:2)

Imagine for a moment that your grandfather had hidden some treasures in the backyard. Would you search for these treasures? If you were to run out to look for these treasures, you would have to believe several things. You would have to believe that:

- a. Grandfather exists, and he really did hide these things in the backyard.
- b. Grandfather is good, and the discoveries will not be bad for you.
- c. Grandfather has not made it too difficult or impossible for you to find the treasures.

We must believe these same things about God and His world. He really does exist and He has hidden things in His world



Glacier National Park in Montana, USA

for us to discover. Somewhere He has hidden the cure for cancer and other things. But He challenges us to put effort into finding these things. We believe that there is order in the world and that there are solutions to our problems, because we believe that God is good. We believe His promises.

4. We can study science because we know God is in control of the world and He will not let it get out of control. If we let a ball drop out of our hands 10,000 times in a row, we could watch it fall to the ground. And we can be sure that it will fall again the 10,001st time because God has made natural laws and patterns to prevent chaos in our world. When Noah came out of the ark, the Lord promised him (and us) that the world would run by a regular pattern.

Then Noah built an altar to the Lord, and took of every clean animal and of every clean bird, and offered burnt offerings on the altar. And the Lord smelled a soothing aroma. Then the Lord said in His heart, "I will never again curse the ground for man's sake, although the imagination of man's heart is evil from his youth; nor will I again destroy every living thing as I have done.

"While the earth remains,
Seedtime and harvest,

Cold and heat,
Winter and summer,
And day and night
Shall not cease." (Genesis 8:20-22)

5. Most importantly, true science must be done in humility and the fear of God. When scientists become proud of their own knowledge, they begin to destroy science.

The fear of the LORD is the beginning
of knowledge,
But fools despise wisdom and
instruction. (Proverbs 1:7)

6. Christians have a different purpose for studying science than unbelieving scientists. Christian students and Christian schools are completely different from non-Christian education.

We study the world in order to praise God, to give glory to God, and to thank God for what He has done. This is the most important reason to study science. When we look at God's world, we are wowed. We are impressed. We want to stand up, lift our hands in the air, and sing a praise song.

*Praise God from whom all blessings flow!
Praise Him all creatures here below!*

Thus, singing needs to be an important part of the science class. You will not hear songs of praise coming out of ungodly science classrooms. This is one of the biggest mistakes that non-Christian schools make when they teach science. They forget to sing praises to God.

7. Another reason for Christians to study science is because God has assigned this task to us. He has given us a reason in that we are to rule over His world. He wants us to make good use of His creation. Of course, God owns the whole world. And He rules the world. But He wants us to take care of His world. He wants us to make good use of the trees and build houses. He wants us to make good use of the iron ore in the ground and make cars and airplanes out of it. He wants us to take care of the animals so they won't all die.

So God created man in His own image; in the image of God He created him; male and female He created them. Then God blessed them, and God said to them, "Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth." (Genesis 1:27-28)

Unbelievers will study science so they can learn things and feel proud about

themselves. They want humans to evolve into some smarter or some better creature, and they think this will happen if they learn enough about science. But they cannot define what a better creature would look like. Some believe science will keep the human race from disappearing and dying out. They have not considered the problem of sin against God. They do not trust that God has an eternal purpose for us.

So you see, there are big differences between how unbelievers study science and how Christians study science. As we study science or teach science, we do not believe that we are accidents. We are not accidents of nature trying to discover or create more accidents. We have ultimate purpose to study science. God has placed ultimate meaning and significance upon our own lives. There is great meaning to everything we study. There is great purpose to every part of our lives. And, the greatest purpose of all is to glorify the God who made us and everything around us!

The heavens declare the glory of God;
And the firmament shows His handiwork.
Day unto day utters speech,
And night unto night reveals knowledge.
There is no speech nor language
Where their voice is not heard.
(Psalm 19:1-3)



Pray

Take a moment and thank the Lord for the following:

1. That He has given us eyes, ears, hands, and brains to discover His world.
2. That He has hidden wonderful secrets in the world for us to discover.
3. That He is wiser than we are.

Sing

How Great Thou Art!

O Lord my God, when I in awesome wonder
Consider all the worlds Thy hands have made,
I see the stars, I hear the rolling thunder,
Thy power throughout the universe displayed:

[Refrain]

Then sings my soul, my Savior God, to Thee:
How great Thou art! How great Thou art!
Then sings my soul, my Savior God, to Thee:
How great Thou art! How great Thou art!

When through the woods and forest glades I wander
And hear the birds sing sweetly in the trees,
When I look down from lofty mountain grandeur,
And hear the brook and feel the gentle breeze;

And when I think that God, His Son not sparing,
Sent Him to die, I scarce can take it in,
That on the cross, my burden gladly bearing,
He bled and died to take away my sin.

When Christ shall come with shout of acclamation
And take me home, what joy shall fill my heart!
Then I shall bow in humble adoration,
And there proclaim, My God, how great Thou art!

(If you do not know the hymn, you may listen to a version of the hymn on the Internet with supervision and sing along with it.)

Watch

To watch the recommended videos for this chapter, go to [Generations.org/GodMadeAnimals](https://www.generations.org/GodMadeAnimals) and find the videos for Chapter 1. Our editors have been careful to avoid films with references to evolution; however, we would still encourage parents or teachers to provide oversight for all Internet usage. These videos may not give God the glory for His amazing creative work, so the student and parent/teacher should respond to these insights with prayer and praise.



View of the
Milky Way Galaxy

