

Biblical Worldview Scope for *Science 5*, 5th ed.

Introduction: This document is an attempt to answer (in the form of a scope) the question, "What must a fifth-grade student comprehend and value in order to understand science from a biblical worldview?" What follows is a list of the themes that we believe are essential for students of science to understand and internalize.

These five themes mirror earlier grade levels to enhance continuity. However, each successive grade explores additional elements within these subjects. We anticipate that early in the course, students will *explain* these themes. However, as these themes recur, students will *evaluate* ideas, *formulate* a Christian understanding, and *apply* what they have learned to real-life situations.

History of Nature reflects the biblical view of origins and the past.

Creation

As described in the book of Genesis, God created the heavens and the earth. Being the only eyewitness to Creation, God alone can accurately describe the beginning of nature. He provides this description in the opening chapters of the Bible. This description includes a time frame of six 24-hour days as He formed the earth. Connecting the biblical genealogies in Genesis 5 and 11 to later dated events reveals that the earth is roughly six or seven and a half thousand years old.¹

The Bible also explains that a worldwide Flood drastically changed the surface of the earth. Geological strata, land-forms, and the fossil record testify to this catastrophic event. Contemporary natural activity continues to demonstrate the Flood's impact on the world.

Fall

Fallen man denies supernatural creation because it is seen as antithetical to science. Many scientists reject the biblical record in favor of contrary frameworks. Their assumption of uniformitarianism—that all of nature changes at the same rate and extent observed in the present age—rules out a young earth. In this view, the earth's varied land-scapes require billions of years of erosion. Simple life is supposed to have spontaneously appeared billions of years ago and gradually evolved into all life-forms. The distances between stars and the formation of planets are taken as evidence of an ever-greater span of time. Modern science ignores God and His Word, looking to natural processes to determine the history of nature.

Redemption

The Bible can be trusted as a perfect source of truth. Therefore, Christians can confidently evaluate different views of nature with a foundation of God's Word. Many biblical teachings, such as death entering the world after sin (Rom. 5:12) and the Curse on creation itself due to sin (Gen. 3:17–19), are fundamental truths that can correct many wrong views of the history of nature. Believers can reject claims that the earth is billions of years old or that life evolved from single-celled organisms over a similarly vast period. They can also attribute drastic changes to the earth's surface to the biblical Flood and provide scientifically sound explanations for specific geological

¹ This discrepancy is due to disagreement between the Masoretic Text, Septuagint, and Samarian Pentateuch in these genealogies.

observations. Even when clear answers are lacking, Christians can explore scientific difficulties (e.g., distant starlight) to propose solutions that fit the scientific data yet remain biblically faithful. Followers of Christ can reject uniformitarianism while still upholding the consistency of the created order (Gen. 8:22).

Sample Objectives

- 12.1 Relate the conservation of matter to the origin of matter.
- 98.2 Evaluate different views of the origin of the solar system.
- 85.3 Defend the biblical worldview regarding the location of fossils within rock layers.

Design in Nature explores the wisdom of God's design in all of creation.

Creation

All of creation testifies to the wisdom of its Creator God. He is the peerless architect, engineer, and artist of all things. As people have further investigated the depths of the universe and the microscopic details of the earth, God's amazing design has become even more astonishing. The efficiency and intricate cooperation of so many variables defy coincidence and affirm the Creator's involvement. Though creation is constantly changing, it maintains the boundaries and limitations designed by God. The many cycles in nature (e.g., the water cycle, nitrogen cycle, tides, weather patterns, and planetary movements) all continue to operate effectively and predictably due to God's wise design and power (Heb. 1:3).

Fall

Despite God's initial design, creation is now marred by sin. Though they retain much of their excellence, perfect designs no longer function perfectly after the Fall. Creation now groans in corruption and futility (Rom. 8:19–22). Many modern scientists blame God (or the supposed lack thereof) for these harsh realities. They argue that design is merely apparent rather than factual. Those who deny the existence of God claim that time and chance have produced all that exists. Others may accept that God was involved in Creation but believe He is now disinterested or was unable to invent perfect systems.

Redemption

The Bible teaches that nature appears designed because it *is* designed (John 1:3). Even with the effects of the Fall, God's creation still displays His wisdom in its excellent function (Jer. 31:35). Christians must not attribute any good observed in nature to anything or anyone but a divine Designer, nor any bad to that same Designer. Believers can also counter the negative effects of the Fall by mimicking and applying God's design. It is good and right for humans, as God's image-bearers, to design new things to help fulfill the Creation Mandate. Though difficulties will not be fully overcome until Christ returns, His people should be invested in doing good as they wait for His coming.

Sample Objectives

- 25.5 Explain why scavengers and decomposers are important to an ecosystem.
- 53.4 Evaluate why God's perfect design in creation no longer functions perfectly.
- 79.2 Create a presentation identifying the nutritional benefits of the mineral.

Importance of Humans describes the centrality of humanity in creation and God's expectations for the relationship between humans and nature.

Creation

Humans are the crown jewel of creation. Made in God's own image, they are unique among nature and central to its purpose (Gen. 1:26–28). People represent God's likeness in the world and have been collectively assigned the role of prime minister to creation. Under the authority and supervision of God, people oversee the world and utilize it for good. The ideal relationship between humanity and the environment benefits both parties but prioritizes humanity. Science is a tool for accomplishing this ideal.

Fall

Far from making Adam and Eve like God, sin introduced many dangers and difficulties into their lives. Intense storms, diseases, predators, thorns, and other hazards are all the result of man's sin. People must now work significantly harder to thrive, and science faces many more challenges in helping people flourish. Further, naturalism rejects the authority and importance of humans. It argues that humans are merely a more evolved species of animals with no inherent right to rule over the rest of nature. Thus, science bears no burden to prioritize the good of humanity, often leading to unethical experimentation that denigrates the image of God.

Redemption

Despite shared characteristics with animals, humans do not arise from a common ancestor but rather from a common Creator. The Bible clearly affirms that humans bear God's image (James 3:9) and supports their priority over the rest of nature. A biblical view of science seeks to utilize the earth in the service of humanity without needlessly harming nature. This principle has important ethical implications and applications for many disciplines of science. Love for God and others should be the primary motivation of all scientific pursuits.

Sample Objectives

- 33.3 Explain how studying ecosystems allows people to exercise good dominion.
- 45.1 Formulate a biblical approach to the use of natural resources.
- 142.4 Propose a way to demonstrate love by accommodating someone with an allergy or autoimmune deficiency.

Purpose of Science defines the proper role of science as a helpful tool for exploring creation and solving problems out of love for God and others.

Creation

Science is the systematic study of God's world using observation. It allows people to glean wisdom from what God has revealed in nature and to better align themselves to His design. This is all in service to God's first command to people, to have dominion over the earth (Gen. 1:28). Science is a powerful tool that enables humans to fulfill this command more effectively.

Fall

Because science is a powerful tool, some have attempted to replace God with science. They seek ultimate power over the material world and authoritative answers to existential and philosophical questions from science, but these aims go beyond science's limitations. Nevertheless, they pursue these ends to erase belief in the supernatural. Their distaste for religion as a foolish or even dangerous concept drives them to reject God and His Word. A further consequence of rejecting God in favor of science is a moral authority vacuum. Science cannot make authoritative

moral pronouncements; thus, every person is left to create his or her own moral standard. Such relativism encourages unethical scientific practices that harm people and the rest of God's creation.

Redemption

In introducing additional hindrances to fulfilling the command of Genesis 1:28, sin brought greater usefulness to science. Disease, warfare, thorns, and pests are just a few results of the Fall. Science is a great gift from God because it can mitigate these factors so that people may still thrive and exercise dominion over the earth. Christians embrace science but recognize its God-given limitations. Some realities simply cannot be observed (Heb. 11:1). Others cannot be accomplished through science (e.g., the creation of energy or life, immortality, and the subversion of natural laws). Additionally, man's mind has been contorted by sin (Eph. 4:17–19), so people cannot interpret scientific data without error. Believers should utilize science in submission to the authority of God's Word. When used within a biblical framework, science complements Scripture by helping people better understand natural revelation.

Sample Objectives

- 137–38.4 Describe the job of an epidemiologist.
- 70.3 Evaluate the strengths and limitations of science in relation to weather.
- 143–45.3 Write a news report about how the discovery proved to be beneficial.

Modeling in Science presents the usefulness of models for understanding creation but also their limitations due to human error.

Creation

As beings made in His image, people have been enabled by God to understand and explore much of creation. But unlike God, people are limited in their capacity to understand (Isa. 55:8–9). To overcome these limitations, humans use models to approximate reality in ways that make sense to them. A model is a simplified representation of something. Models can be as basic as words: Each word represents an aspect of creation and aids humans in better communication and stewardship of God's world. Scientific models are representations that are compared to what is observed in nature. They help people test, predict, solve problems, and gain dominion over creation. Scientific models can be concrete and simple (e.g., a diagram of cell division or the water cycle) or incredibly complex (e.g., the big bang hypothesis). Models that closely reflect reality allow people to avoid costly and dangerous trial-and-error experimentation and to better understand the world.

Fall

The Fall darkened man's understanding so that what should be obvious is now obscured or ignored (Rom. 1:18–22). Error and intentional manipulation are now commonplace in observation and interpretation. Because modeling requires human interpretation, models share these same flaws. Poorly designed models will reinforce false conclusions. Fallen people sometimes design models for the purpose of supporting their presuppositions rather than pursuing truth. Even worse, some models are created to intentionally undermine the clear teaching of the Bible (e.g., the big bang and evolution). Many overlook the limitations and dangers of modeling and put too much faith in their predictions.

Redemption

Models are an excellent way for people to exercise dominion over the earth. They allow people to better understand complex topics and to apply scientific knowledge with relative confidence. Flight simulators, ballistics dummies, hurricane forecast cones, and wind tunnels allow for fine-tuning of variables to enhance the usefulness of designs, predictions, and inventions. More complicated models allow people to work around the limitations of time

and space, yet these complex models also exhibit significant opportunities for error. Because humans are finite, Christians should be careful not to put too much trust in their models. They should not expect models to provide absolute truth or final answers. Scripture alone is truth (John 17:17) and must be foundational to all scientific endeavors.

When nature seems to contradict the Bible, it is rather a particular model contradicting the Bible. Because God does not lie and because the Bible and nature both come from the mouth of God, nature and Scripture cannot be in contradiction. Followers of Christ must evaluate models with the Bible and create models that harmonize with its content. They must also be humble and willing to reject or replace models when warranted by further observation.

Sample Objectives

- 117–18.5 Apply scientific modeling to describing God's creation.
- 54.5 Draw conclusions about how a model of a waxy leaf compares to a real leaf.
- 75.4 Communicate, using the model, ways God designed the earth's major systems to interact.