The Bible and Science



SABBATH AFTERNOON

Read for This Week's Study: *Gen.* 1:1; 2:1, 2; 7:11-24; Deut. 4:32; Pss. 100:3; 139:14; Isa. 42:5; 45:18; Jer. 33:22; John 1:1-3; Heb. 1:2.

Memory Text: "The fear of the Lord is the beginning of knowledge, but fools despise wisdom and discipline" (Proverbs 1:7, NIV).

Key Thought: Though often viewed as in opposition to the Bible, science can help strengthen our faith in the Word of God.

In the earliest years of the scientific revolution (the seventeenth century), science was viewed as a way to understand God. All the Learly giants (Descartes, Kepler, Galileo, Copernicus, Newton) believed their work was revealing the handiwork of the Creator. Kepler, talking about his achievements, wrote: "I am stealing the golden vessels of the Egyptians to build a tabernacle to my God from them. . . . I cast the die, and I write the book. Whether it is to be read by the people of the present or of the future makes no difference: let it await its reader for a hundred years, if God himself has stood ready for six thousand years for one to study him." Over time, however, science started moving away from the idea of God, choosing instead to work in a purely materialistic, atheistic paradigm. This, of course, led to the struggle between faith and science that we often hear about today.

Though we certainly acknowledge the challenges that science can present, this week we'll focus on places where science has, indeed, given us reasons for our trust in the Bible.

^{*}Study this week's lesson to prepare for Sabbath, May 12.

Anthropic Coincidences

Look up Genesis 1:1; 2:1, 2; Deuteronomy 4:32; Psalm 100:3; Isaiah 42:5; 45:18; John 1:1-3; Colossians 1:16; Hebrews 1:2; Revelation 10:6; 14:7. What's the one point that all these texts have in common?

For many years, much of science worked on the presupposition that all existence, including human life, was the result of pure chance. We are just a big accident, nothing more.

Now, though, science seems to be moving in another direction. In fact, a new phrase has been coined: "anthropic coincidences," from the Greek word *anthropos*, meaning "man." Science reveals that many factors in the universe are so finely tuned that even the slightest variation would create an environment unfit for human existence. It's almost as though the universe was created with the existence of humanity in mind!

What are some of these "anthropic coincidences"?

For starters, if the rate of expansion after the creation of the universe had been smaller by one part in a hundred million, the universe would have collapsed in on itself. On the other hand, had it been greater by one part in a hundred million, the universe would have expanded too rapidly for stars or planets to form.

Also, one of the known basic forces in nature is called the strong nuclear force. Had it been slightly weaker, there would have been only hydrogen in the universe; had it been slightly stronger, there would have been only helium. In either environment, humanity as we know it could never have been formed.

There are many other examples, enough to get even someone like the famed Stephen Hawking (hardly a biblical creationist) to admit: "The odds against a universe like ours emerging out of something like the Big Bang are enormous. . . . I think there are clearly religious implications."—Quoted in Ian Barbour, *When Science Meets Religion* (New York: Harper Collins, 2000), p. 58.

American poet Walt Whitman once wrote: "And the narrowest hinge in my hand puts to scorn all machinery." What other examples from nature put "to scorn all machinery"? What does this complexity and design say to us about a Creator? Be prepared to talk about your examples in class.

I Have to Teach Tomorrow . . .

► Key Text: John 17:17

Teach the Class to:

Know: That the study of science, at times, can validate some biblical claims

Feel: That the Word of God can stand the test of scientific study.

Do: Live according to biblical standards.

Lesson Outline:

I. Science Supports the Bible (Prov. 1:7)

A The Bible and science agree that the stars are billions of miles away from the earth and cannot be numbered. What else do the Bible and science agree upon?

• How is scientific evidence of the function of organs and systems of the body a challenge to the evolutionary model?

II. The Body System and Bible Principles (Ps. 100:3)

What do scientists understand about the link between the mind and the body?

III. Evidence in the Rocks (Ps. 24:1)

How are global deposits in the layers of the rocks consistent with the Genesis account of the Flood?

► **Summary:** The study of science has given evidence that the Bible is true. Many scientific findings are consistent with Bible teachings.

Learning Cycle

STEP 1—Motivate!

Just for Teachers: Step 1 of the Natural Learning Cycle links the learners' experiences to the lesson. Help your class members answer the question, Why is this lesson important to me?

Representatives of science and religion often seem to be at odds over fundamental issues: the origin of the universe; our planet, and life on it;

Astronomy

Have you ever stood outside on a clear night and looked at the stars? How many could you count? Though there are a lot, there are not more than can be counted, at least with the naked eye, which is how the Bible writers saw them.

Read Jeremiah 33:22. How many stars does he say are out there?

Ptolemy many centuries ago counted about 1,056 stars; Tycho Brahe counted up to 777; Kepler, 1,005. Before the invention of the telescope in the seventeenth century, people believed that the number of stars was 5,119. The telescope, of course, changed all this dramatically. Today, especially with the Hubble Space Telescope, the number of stars seems beyond counting. It is estimated that there are hundreds of billions of stars in our galaxy alone. Astronomers have estimated that there are about 10²² (that is, 10 thousand billion billion) stars in the universe. If one could count even as many as 10 different numbers per second, it would take at least 100 million billion years to count up to 10²². And over time, who knows how many more will be discovered?

Read Job 22:12. What else is Eliphaz saying about the stars?

Many ancient people believed the stars were various distances away, from a few kilometers to a few hundred at most. Science over the past few centuries has shown just how far they really are. The sun is 93 million miles away, our closest star; others, even if we traveled at the speed of light (300,000 kilometers per second), would take us hundreds, thousands, even millions of years to reach! And though Eliphaz probably wasn't thinking about astronomy, he, nevertheless, made a statement that science certainly has proven correct.

Though it's good when science seems to affirm our faith, why must we be careful in not putting too much stock in science when it comes to matters of faith? Why, too, is it important to remember that science is still only a human endeavor? See Jer. 17:9, 1 Cor. 1:21, 3:19.

the nature of the human animal; the problem of evil; and the ultimate destiny of the universe and the human race.

The disagreement and misunderstanding continue on the human level as well. Scientists view religionists—and Christians in particular—as unthinking sheep and their leaders as slick talkers with something to hide. Religionists view the scientifically minded as cold-hearted, arrogant knowit-alls who are subtly or not-so-subtly trying to destroy or steal their faith.

Here is the worst part: Both sides are right at least some of the time. Religious leaders and institutions do have a history of attempting to sweep scientific findings under the rug when they conflict with their interpretation of their Scriptures. And scientific materialists have a gift for extolling the miraculous qualities of the rational human brain while displaying the most blatant contempt for the beliefs of actual owners of human brains.

Many of you have probably been tempted to believe that science is indeed separate from, or hostile to, the Christian faith. However, much in science actually supports many of our core beliefs: an intelligent Creator, a benevolent universe, and the uniqueness of the human person. Many atheists and agnostics have been led to faith by studying science and nature. Maybe it is time for a second opinion.

►STEP 2—Explore!

Just for Teachers: This step of the Natural Learning Cycle presents information learners can use to help them better understand the lesson. Help your class members answer this question, What do I need to know from God's Word?

Bible Commentary

I. The Beginning of Knowledge

(Review Proverbs 1:7 with your class.)

Most scientific inquiry is based upon assumptions about the nature of knowledge that the Bible does not share. The idea is that knowledge results from the individual human brain attempting to come to grips with all the random stuff out here, without reference to any law above itself.

The Bible, however, regards knowledge as stemming from acknowledging God and as having moral, spiritual, and intellectual dimensions.

Fearfully and Wonderfully Made

Though possibly a bit overstated, the following quote tells us something about the complexity of the human brain. "There are trillions of neurons in a human brain; the number of possible ways of connecting them is greater than the number of atoms in the universe."—Ian Barbour, *When Science Meets Religion* (New York: Harper Collins, 2000), p. 62.

With that above quote in mind, read Psalm 139:14. How has science affirmed the truth of this text?

As we said in Sunday's lesson, more and more science has been moving away from the chance argument to explain the existence of human life. And no wonder. Over the years, as science has advanced steadily, as we learn more and more about the wonders of creation, the evidence for design gets only stronger and stronger. It's so strong, in fact, that recently one vocal opponent of intelligent design (and the implications of a Creator behind it) argued that the universe is a thing that simply appears to be designed even though, of course, it isn't. In other words, it just looks that way.

Meanwhile Francis Crick, probably the most famous biologist of the twentieth century and a vehement atheist, concluded that life was too complicated to have arisen in the supposed billions of years between the cooling off of the earth and the rapid emergence of life forms. Crick speculated, therefore, that life must have started somewhere else and was then brought here, perhaps by space aliens who wanted to see the earth (see again 1 Cor. 3:19 and Ps. 14:1).

Another exciting development came from the work of biochemist Michael Behe. Charles Darwin partially based his theory of evolution on the idea that changes came over time to species through a series of small, successive modifications. If, Darwin said, any complex organ could be shown not to have gone through these steps, his theory would break down.

Behe, not a biblical creationist, showed various aspects of the human body—the cilia, the eye, and blood clotting—that could not have arisen according to the basic evolutionary schema. According to Behe, they couldn't have arisen over time because, in order for the organ to function at all, all the pieces already had to be in place at once. If one part, or even one step, wasn't there from the beginning, the organ or process could not exist at all. His evidence presents a strong challenge to the evolutionary model of creation. The question, therefore, remains: If these things didn't come by chance, through the evolutionary processes, then how did they arise (John 1:1-4, Acts 17:28)?

Consider This: The eleventh-century scholar Anselm of Canterbury, wrote, "Nor do I seek to understand that I may believe, but I believe that I may understand. For this too I believe, that unless I first believe, I shall not understand." How does belief help us to understand? Can it be said that even the most seemingly skeptical person starts from a point of belief in something?

■ What else do the following Bible texts suggest about the nature of true or false wisdom? (Gen. 3:6, Job 38:37, Ps. 37:30, 1 Cor. 1:21, 2:6.)

II. Creation or Coincidence?

(Review Isaiah 45:18, John 1:1 with your class.)

Consider This: The Bible takes it as a matter of course that the earth was created by God. Why do the authors of the Bible regard this as self-evident, whereas science does not?

"Creation is the landscape of the Bible. It sees God as 'the maker of heaven and earth,' the Creator of all things. There is activity, 'creation' where things happen. The energy of God's will, not just the energy of the sun, sustains the biosphere where grass grows and animals feed, and man depends on them for his own food."—James M. Houston, *I Believe in the Creator* (Grand Rapids, Mich.: Eerdmans, 1980), p. 15.

■ In spite of occasional scientific or philosophical arguments for the randomness of the visible cosmos, most people continue to behave as if the universe and their lives in it have purpose. How does the Bible support this intuitive sense? See Jeremiah 1:5. How do you see God's plan or purpose manifested in your experience?

III. Evidence of Design

(Review Romans 1:20, 21 with your class.)

"Being a scientist, trained in the habits of thought and language of the twentieth century rather than the eighteenth, I do not claim that the architecture of the universe proves the existence of God. I claim only that the architecture of the universe is consistent with the hypothesis that mind plays an essential role in its functioning."—Freeman Dyson, *Disturbing the Universe* (New York: Harper Colophon, 1979), p. 251.

Consider This: Knowledge of the design inherent in the universe often does not lead to the belief in the God of the Bible, or indeed of any

A Merry Heart, a Broken Spirit

Read Proverbs 17:22. What simple and yet, at the same time, profound message is found in this text? In what ways have you yourself experienced the truth of these principles?

Is it really true that a merry heart does good like a medicine? Over the years scientists more and more understand the inseparable link between the mind and the body. What impacts one impacts the other. Research shows that, for instance, something as simple as a hearty laugh exercises the lungs, stimulates the circulatory system, and increases oxygen intake. It also stimulates the sympathetic nervous system to make endorphins, the body's natural opiates, which can soothe and relax the mind and may even increase the activity of the immune cells.

On the other hand, there's the last half of the text, which implies that depression can impact the body in a negative manner.

"In recent years, however, evidence has accumulated that psychology can indeed affect biology. Studies have found, for example, that people who suffer from depression are at higher risk for heart disease and other illnesses. Other research has shown that wounds take longer to heal in women who care for patients with Alzheimer's disease than in other women who are not similarly stressed. And people under stress have been found to be more susceptible to colds and flu, and to have more severe symptoms after they fall ill."—Erica Goode, "Power of Positive Thinking May Have a Health Benefit, Study Says," *New York Times*, Sept. 2, 2003.

Moreover, a recent study from the University of Wisconsin shows that "the activation of brain regions associated with negative emotions appears to weaken people's immune response to a flu vaccine."—Ibid.

What's the message for us in Philippians 4:6-8? Though we often tend to view these passages in light of the spiritual aspect only, what kind of physical benefits can we get from Paul's words here, as well? What changes do you need to make in the things you read and watch and listen to in order to better realize the promises found in these texts?

God at all. What is necessary for this knowledge to become saving faith?

► STEP 3—Practice!

Just for Teachers: This step of the learning cycle will assist you in helping your class members find the answer to the following question, How can I practice the information I just learned?

Thought Questions:

Some believe that scientific inquiry should be informed by the Word of God, and that when our observations conflict with the Bible, we should discard them. Is this compatible with the idea of science as an unbiased search for truth? Is there such a thing as an unbiased search for truth? What kind of assumptions might many supposedly objective scientists bring to their research?

Application Questions:

- O Seventh-day Adventists view the Sabbath as a memorial to Creation and partially attribute the pervasiveness of evolutionary theory to the disregard of the seventh-day Sabbath. Do you think this is true? Would increased awareness of the biblical seventh-day Sabbath lead to increased awareness/acceptance of biblical Creation? Explain your answers.
- 2 Many creationists attribute the immorality, amorality, and despair of modern life to the acceptance of evolutionary teachings that reduce humankind to the level of animals. Is this true? Explain your answer. Conversely, how does awareness of God's role as Creator affect your conduct of life, your self-concept, and your treatment of creation and fellow humans?

Witnessing

Belief in biblical Creation has become a hot-button issue. Those of us who believe in it find ourselves associated with a raft of political/social views that we may or may not adhere to and that automatically invalidate our witness to many otherwise thoughtful people. What can we do to help others hear our beliefs on their own merits?

Consider This: Many of us who interact with secular people find it hard to explain our belief in creationism. Scientists, however, are finding the idea of intelligent design ever more credible, with even many avowed atheists admitting the religious implications of their discover-

Science and the Flood

Read Genesis 7:11-24. What kind of devastation would this Flood have wreaked on the earth?

If the Hebrew phrase "the great deep" (Gen. 7:11, NIV) refers to the ocean(s), then the implication is that on the first day of the Flood, when the rain began to fall, the ocean floor may have been disrupted by the bursting forth of "all the springs" (vs. 11, NIV). Such a catastrophic global event as the Flood should have left worldwide evidence of its occurrence. Science shows that, indeed, it did. There are global deposits in the layers of rock quite consistent with (though not proof of) the Genesis Flood. These deposits contribute to the way in which the rock layers are identified and defined. Gigantic sequences of sandstone covered by shale and limestone in what are called Cambrian rocks; massive, transported limestone found in certain rock levels; as well as coal and oil deposits found throughout these levels—all these deposits are consistent with the Flood.

Furthermore, the destruction of life on this earth during the Genesis Flood was extensive, as described in Genesis 7:21 and 22. In our modern world there is little preservation of plants and animals that die. These organisms are decomposed and recycled to provide the nutrients necessary for life to continue. However, buried within the earth are extensive fossil concentrations with evidence of a wide variety of plants and animals that do not exist in our world today, again evidence consistent with the Flood story.

Other evidence is the rapid, massive deposition of rocks, sands, and muds. There are layers of rock throughout the earth that have been deposited so quickly that there is no evidence of erosion between the layers. And though the geologic community often argues that these layers needed millions of years to form, the rocks show no direct evidence that such time has passed. These rock layers do not, however, resolve all of the time issues; thus, the dating methods and sequences of fossils in the rock record remain debatable, at least for now.

Though God gives us reasons for our faith, there is always room for doubt. How can you live in a way that feeds faith rather than doubt? That is, what practical daily things can you do to help strengthen yourself in what we believe?

ies. As a confidence-building exercise, try to familiarize yourself with such writers as Michael Behe (author of *Darwin's Black Box*).

► STEP 4—Apply!

Just for Teachers: In this fourth and final step of the Natural Learning Cycle, you will want to encourage class members to make a life response to the lesson. Help them answer this question: With God's help, what can I do with what I have learned from this lesson?

"God is the foundation of everything. All true science is in harmony with His works; all true education leads to obedience to His government. Science opens new wonders to our view; she soars high and explores new depths; but she brings nothing from her research that conflicts with divine revelation. Ignorance may seek to support false views of God by appeals to science; but the book of nature and the written Word do not disagree; each sheds light on the other. Rightly understood, they make us acquainted with God and His character by teaching us something of the wise and beneficient laws through which He works."—Ellen White, *The SDA Bible Commentary*, vol. 7, p. 916.

Consider This: Not everyone needs or desires a deep acquaintance with the latest discoveries in subatomic physics to appreciate God's presence in nature and in the harmony of the universe. Offer the following practical suggestions to help your students deepen their acquaintance with God's natural creation:

• What are the major plants and animals found in your area? What are the major environmental threats or issues in your country? After all, you live there.

2 God intended for us, His creatures, to be sustained by the complex web of interrelationships we call nature. In other words, food does not originate in the supermarket. Get a guide to wild edible plants. Forage for, say, greens for a salad. Exercise caution, but prepare to be surprised by how many things God created that are not poisonous.

3 If you watch television, devote some of that time to watching nature/science programs or videos. There are many excellent Creation-oriented videos available at your local Adventist Book Center or Christian bookstore. Programs on mainstream channels may be problematic but are also excellent opportunities to clarify your own beliefs.

The Bible's authors saw God's reflection in the order and harmony of the heavens. You can too. Find a place where you can see the sun rise and note the regularity of its movement through the skies as the seasons change. How else can you see God's reflection in nature?

FRIDAY May 11

Further Study: "Genesis and Geology," pp. 70–97, in *The SDA Bible Commentary*, vol. 1; Ellen G. White, "Mind Cure," pp. 241–259; "In Contact With Nature," pp. 260–268, in *The Ministry of Healing*.

"He who has a knowledge of God and His word through personal experience has a settled faith in the divinity of the Holy Scriptures. He has proved that God's word is truth, and he knows that truth can never contradict itself. He does not test the Bible by men's ideas of science; he brings these ideas to the test of the unerring standard. He knows that in true science there can be nothing contrary to the teaching of the word; since both have the same Author, a correct understanding of both will prove them to be in harmony. Whatever in so-called scientific teaching contradicts the testimony of God's word is mere human guesswork."—Ellen G. White, *The Ministry of Healing*, p. 462.

"God is the foundation of everything. All true science is in harmony with His works; all true education leads to obedience to His government. Science opens new wonders to our view; she soars high, and explores new depths; but she brings nothing from her research that conflicts with divine revelation. Ignorance may seek to support false views of God by appeals to science, but the book of nature and the written word shed light upon each other. We are thus led to adore the Creator and to have an intelligent trust in His word."—Ellen G. White, *Patriarchs and Prophets*, pp. 115, 116.

Discussion Questions:

- As a class, share your answers to Sunday's final question. What can you learn from each other's examples?
- 2 What can be done to help someone who, swayed by the arguments of science, finds it very hard to believe in the Bible? How can you help?
- **1** If willing, share with the class some of your own personal experiences with the power of the mind over the body and health. What have you learned that could help others? What role can prayer, Bible study, witnessing, and ministering to the needs of others play in helping you heal mentally and even physically?