

The Bible and Science



SABBATH—MAY 5

READ FOR THIS WEEK'S STUDY: Genesis 1:1; Genesis 2:1, 2; Genesis 7:11-24; Deuteronomy 4:32; Psalm 100:3; Psalm 139:14; Isaiah 42:5; Isaiah 45:18; Jeremiah 33:22; John 1:1-3; Hebrews 1:2.

MEMORY VERSE: “If you really want to gain knowledge, you must begin by having respect for the Lord. But foolish people hate wisdom and training” (Proverbs 1:7, NlrV).

KEY THOUGHT: Science may be seen as an enemy of the Bible, but science can help make stronger our faith in the Word of God.

IN THE EARLY YEARS OF THE SEVENTEENTH CENTURY, science was seen as a way to understand God. All the early giants of science believed their work showed the handiwork of the Creator. But science began moving away from a belief in God. This led to the struggle between faith and science that we often hear about today.

Science can present challenges (questions) to faith. But this week we will focus on how science has given us reasons for our trust in the Bible.

SUNDAY—MAY 6**HOW THINGS FIT TOGETHER
FOR HUMANS (Psalm 100:3)**

What is the one point that the following verses have in common? Read Genesis 1:1; Genesis 2:1, 2; Deuteronomy 4:32; Psalm 100:3; Isaiah 42:5; Isaiah 45:18; John 1:1-3; Colossians 1:16; Hebrews 1:2; Revelation 10:6; Revelation 14:7.

For many years much of science was based on the idea that all life resulted from pure chance. We are just a big accident, nothing more.

But now science seems to be moving in another direction. This new direction has a name: “anthropic coincidences”—how things fit together for humans. Science shows that many things in the universe¹ fit together so well. Even the littlest differences in these things would create an environment unfit for human life. This is the same as saying that the universe was created with human life in mind! And it seems to say that all life and things on earth were created by Someone with a supreme mind (God).

So, what are some of these anthropic coincidences?

For example, if the rate of expansion (growth) after the creation of the uni-

verse had been smaller by one part in a hundred million (100,000,000), the universe would have collapsed in on itself. But had it been greater by one part in a hundred million the universe would have expanded (grown) too rapidly for stars or planets to form.

Also, one of the basic forces in nature that we know of is called the strong nuclear force.² Had the nuclear force been a little weaker, there would have been only hydrogen³ in the universe. Had the nuclear force been a little stronger, there would have been only helium.⁴ Either way, humans could never have been formed.

There are many other examples. Here is one by Stephen Hawking, a famous scientist who does not believe in Creation. Hawking admits, “The chance of a universe like ours coming out of something like the Big Bang⁵ is very little. . . . I think there are clearly religious hints.”—Quoted in Ian Barbour, *When Science Meets Religion* (New York: HarperCollins, 2000), p. 58, adapted.

American poet Walt Whitman once wrote, “And the narrowest hinge [joint] in my hand laughs at all machinery.”⁶ What other examples from nature “laugh at all machinery”? What does the way our bodies were made say to us

¹universe—all the matter, light, and energy that scientists have discovered (found).

²nuclear force—power or energy released from an atom that can be used to do or make something.

³hydrogen—a gas that has no color or odor and is a chemical element. It burns very easily and is the lightest of all known substances.

⁴helium—a very light gas that has no color or odor and is a chemical element. It is used to inflate balloons, because it will not burn or explode.

⁵Big Bang—the theory that the universe was created by a huge explosion.

⁶machinery—man-made tools used to do work.

about a Creator? Be ready to talk about your examples in class.

MONDAY—MAY 7

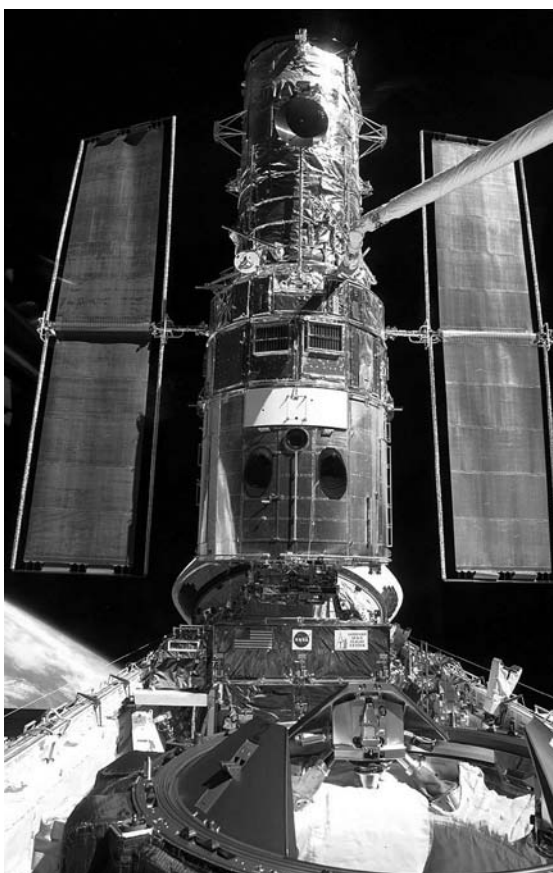
ASTRONOMY⁷ (Jeremiah 33:22)

Have you ever stood outside on a clear night and looked at the stars? How many could you count? There are a lot of stars. But Bible writers thought that all the stars could be counted.

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

Many hundreds of years ago, Ptolemy counted about 1,056 stars. Tycho Brahe counted up to 777 stars. Kepler counted up to 1,005 stars. Before the invention⁸ of the telescope⁹ in the seventeenth century, people believed that the number of stars was 5,119. The telescope, of course, greatly changed the number of stars we can now see. Today the Hubble Space Telescope¹⁰ shows us there are more stars than we can count. There must be hundreds of billions (one billion = 1,000,000,000) of stars in our galaxy¹¹ alone. Astronomers¹² guess that there are about 10^{22} stars in the universe (10^{22} means ten thousand billion billion stars). Another way

of writing ten thousand billion billion is the number 10 followed by 21 zeros! If you could count as many as ten different numbers per second, you still would need at least 100 million billion (100,000,000,000,000,000) years to count up to 10^{22} ! And over time, who knows how many more stars will be discovered (seen for the first time)?



The Hubble Space Telescope helps us to see faraway stars.

⁷astronomy—the study of the stars and planets.

⁸invention—something made that did not exist before.

⁹telescope—lets people see a long way; used to study stars and other planets.

¹⁰Hubble Space Telescope—a telescope in outer space that sees the planets and stars ten times more clearly than a telescope on earth.

¹¹galaxy—a large, independent system of stars; one galaxy has millions to hundreds of billions of stars.

¹²astronomers—men and women who study the stars and planets.

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

Long ago, some people believed the stars were many different distances away. The people thought some stars were only a few kilometers away and that other stars were a few hundred kilometers away at most. Science has shown just how far the stars really are. The sun (our closest star) is 93 million miles away. Even if we traveled as fast as the speed of light (300,000 miles per second), we would need hundreds, thousands, even millions of years to reach other stars! Eliphaz probably was not thinking about astronomy¹³ when he observed how far away the stars are, but science certainly has proved his statement to be correct.

It is good when science seems to support our faith. But why must we be careful not to put too much faith in science? Also, why is it important to remember that science is only a human¹⁴ effort (attempt) to understand the universe?¹⁵ Read Jeremiah 17:9; 1 Corinthians 1:21; 1 Corinthians 3:19.

TUESDAY—MAY 8

**WONDERFULLY MADE
(Psalm 139:14)**

¹³astronomy—the study of the stars and planets.

¹⁴human—man, woman, or child.

¹⁵universe—all the matter, light, and energy that scientists have discovered.

¹⁶design—the way the parts of something are put together or arranged to form or make the whole thing.

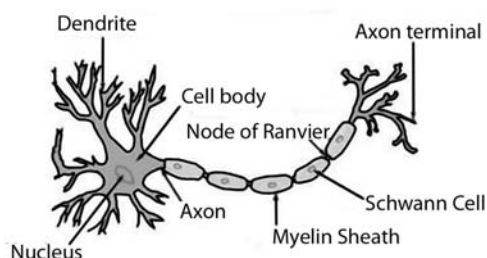
¹⁷neurons—nerve cells.

¹⁸atoms—the smallest part of something.

¹⁹chance—when events happen by accident.

The following quote tells us that the design¹⁶ of the human brain is not simple. “There are trillions [one trillion = 1,000,000,000,000] of neurons¹⁷ in the human brain. The number of ways for the neurons to connect (link) together in the brain is greater than the number of atoms¹⁸ in the universe.”—Ian Barbour, *When Science Meets Religion*, p. 62, adapted.

Structure of a Typical Neuron



There are trillions of neurons in the human brain.

How has science shown Psalm 139:14 to be true?

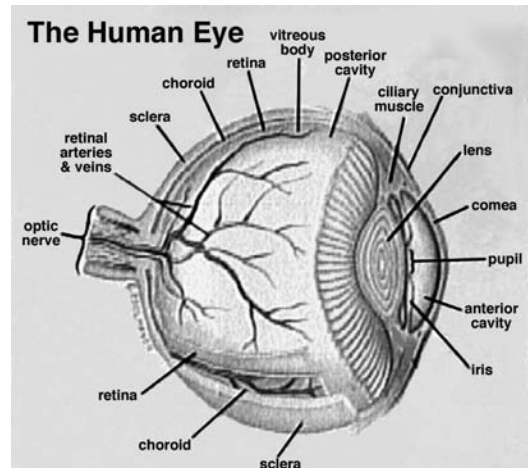
In Sunday's lesson we learned how science has been moving away from the idea that human life was created by chance.¹⁹ And no wonder! Over the years, science has made steady moves forward in the way things work. Science has taught us more and more about the wonders of creation. And the proof that God created the universe

grows only stronger and stronger. Recently someone who is against creationism²⁰ argued that the universe appears to be designed, but that really, the universe is not. In other words, the universe just looks like someone designed it.

Francis Crick was probably the most famous biologist²¹ of the twentieth century and a strong atheist.²² He said that the start of life on earth was not so simple. Crick thought that life could not have started in the billions (one billion = 1,000,000,000) of years between the cooling off of the earth and the rapid (fast) appearing of life forms. Crick made a guess that life must have started somewhere else and was then brought here by space aliens (beings) who wanted to see the earth (1 Corinthians 3:19 and Psalm 14:1).

Another idea about how life first started on earth came from the work of biochemist²³ Michael Behe. Behe was not a Bible creationist. But he showed that different parts of the human body—the cilia (tiny hairs), the eyes, and blood clotting²⁴—could not have come through evolutionary²⁵ chances. This goes against part of Charles Darwin's theory of evolution.²⁶ According to this part of Darwin's theory of evolution, changes came over

time to living things through a series of small changes. Darwin also admitted that if any complex (not simple) organism (life form) could be shown to have not gone through these small changes, then his theory would break down. But, according to Behe, human organs (parts of the body) could not have arisen over time. The heart could not have lived before the kidneys. For the organ to live at all, all the pieces already had to be in place at once. If one part, or even one step, was not there from the beginning, the organ could not survive at all. Behe's evidence²⁷ challenges²⁸ the theory of evolution. One question remains: If life on earth did not come by chance or through evolution, how did life begin (John 1:1-4; Acts 17:28)?



Life did not come to this earth by chance.

²⁰creationism—the belief that God made the universe.

²¹biologist—a scientist who studies living things and the way they live and grow.

²²atheist—a person who does not believe in God.

²³biochemist—a scientist who studies the elements and compounds of plant and animal life and how those elements and compounds act together and separately under different conditions.

²⁴blood clotting—lumps formed when the matter in blood thickens.

²⁵evolutionary—slowly changing from a lower form of life to a higher form of life.

²⁶theory of evolution—the belief that we became humans by slowly changing from a lower form of life to a higher form of life.

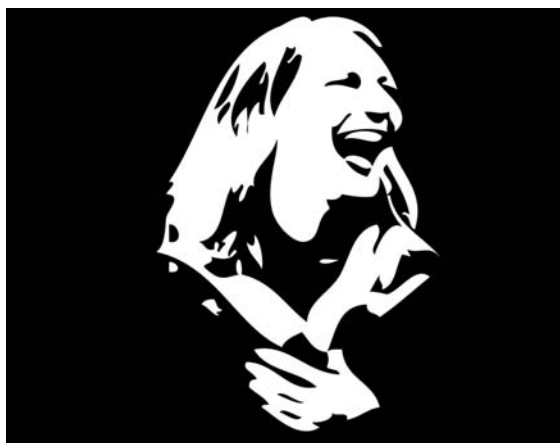
²⁷evidence—something that shows or proves or gives a reason for belief.

²⁸challenges—questions something that is believed to be true or right.

WEDNESDAY—MAY 9**A MERRY (CHEERFUL) HEART, A BROKEN SPIRIT (Proverbs 17:22)**

What simple but deep message is found in Proverbs 17:22? In what ways have you gone through the truth of these principles?²⁹

Is it really true that a merry (cheerful) heart can heal like a medicine? Scientists understand more about the very important connection between the mind and the body. The mind influences³⁰ the body, and the body influences the mind. Research shows that something as simple as a good laugh exercises the lungs, makes blood flow better, and increases the amount of oxygen in the body. Laughter also



Laughter is good for the mind and the body.

stimulates (helps) the nervous system to make endorphins.³¹

These endorphins can relax the mind and may even make the immune cells³² stronger.

But the last half of Proverbs 17:22 suggests that depression (sadness) can hurt the body.

“Science has shown more and more that the mind can influence the body. Studies have found that people who suffer from depression suffer more from heart disease and other illnesses than happy people. Also, wounds take a long time to heal in women who care for people who have Alzheimer’s disease.³³ But wounds take less time to heal in women who do not care for people with Alzheimer’s. And people under stress catch colds and flu more easily and have more symptoms after they fall ill.”—Adapted from Erica Goode, “Power of Positive [Happy] Thinking May Have a Health Benefit [Help], Study Says,” *The New York Times*, Sept. 2, 2003.

A recent study from the University of Wisconsin shows that “thinking bad thoughts weakens the immune system.³⁴ The flu vaccine³⁵ does not work as well in the bodies of people who think bad thoughts.”—*The New York Times*, Sept. 2, 2003.

²⁹principles—basic rules of life.

³⁰influences—the power to act on or affect persons or things.

³¹endorphins—a living chemical compound found in the brain. Endorphins make the body feel better. Some endorphins act like medicine. These endorphins take away pain from the body.

³²immune cells—a cell is a basic unit of living matter. Immune cells fight disease and infection in the body and help keep the body healthy.

³³Alzheimer’s disease—an illness that destroys the brain cells over time. People who are ill with Alzheimer’s disease can lose their memory and the power to think clearly.

³⁴immune system—the part of the body that fights disease and infection.

³⁵vaccine—a substance put into the body to protect against disease.

What is the message for us in Philippians 4:6-8? But, what kind of health benefits (rewards) can we get from Paul's words, too? What changes do you need to make in what you read and watch so you can get the most out of the promises found in Philippians 4:6-8?

THURSDAY—MAY 10

SCIENCE AND THE FLOOD (Genesis 7:11-24)

What kind of destruction would this Flood have done on the earth? Genesis 7:11-24.

The Hebrew wording “the great deep” (Genesis 7:11, NIV) talks about the ocean(s). The “great deep” also suggests that the rain began to fall on the first day of the Flood. Then the ocean floor may have burst open “all the springs” of the whole earth (verse 11, NIV). So, such a great event as the Flood should have left worldwide evidence (proof) of a flood. Science shows that the Flood did leave evidence (proof) on earth. There are wide deposits (pile-ups) in the layers of rock that suggest the Genesis Flood. These deposits show the different rock layers. There are huge layers of sandstone covered by layers of shale and limestone in what scientists call the “Cambrian” rocks. The Cambrian rocks are made of layers of huge limestone carried by water to certain rock levels.

Coal and oil deposits are found throughout these layers. All these deposits are the work of the Flood.

Genesis 7:21 and 22 describe the great destruction of life on this earth during the Genesis Flood. In our world the remains (bodies) of dead plants and animals decay (break down). These broken-down organisms (life forms) are recycled (reused) into fertilizer and food. This fertilizer and food is necessary for life to continue. But buried within the earth are remains of many different kinds of plants and animals that do not live in our world today. Again, this is evidence that helps prove the Flood story.

Other evidence of the Flood is the very quick and large pile-up of rocks, sand, and mud. There are layers of rock throughout the earth that have been deposited by water very quickly. These layers of rock show no evidence of erosion³⁶ between the layers. And geologists³⁷ often argue that these layers needed millions of years to form. But the rocks do not show clear evidence (proof) that the age of the earth is millions of years old. So, the age of the earth remains subject to debate for now.

God gives us reasons for our faith, but there is always room for doubt. How can you live in a way that feeds faith rather than doubt? What useful daily things can you do to help make your faith stronger?

³⁶erosion—the process of wearing away slowly.

³⁷geologists—people who study the earth's crust and the way its layers were formed; geologists also study rocks and fossils, which are the remains or bodies of plants and animals in the rock layers.

FRIDAY—MAY 11

ADDITIONAL STUDY: Ellen G. White, “Mind Cure,” pp. 241–259; “In Contact With Nature,” pp. 260–268, in *The Ministry*³⁸ of Healing; “Genesis and Geology,”³⁹ pp. 70–97, in *The SDA Bible Commentary*, vol. 1.

“Any person who learns to know God by a personal study of His Word will have a strong faith that the Holy Bible was inspired by God. A true Christian has proved that God’s Word is truth. Truth can never oppose [go against] itself. The person who knows God does not test the Bible by men’s ideas of science. The true Christian tests these ideas by the Bible. The Bible is the standard of truth that never fails. The true Christian knows that in true science there can be nothing different from the teaching of God’s Word. True science and the Bible have the same Author. When there is a correct understanding of both the Bible and science it will be seen that the Bible and science agree with each other. Any disagreement between scientific teaching and God’s Word is the result of human guesswork.”⁴⁰—Adapted from Ellen G. White, *The Ministry of Healing*, p. 462.

“God is the foundation⁴¹ of everything. All true science is in perfect

agreement [harmony] with God’s works. All true education [learning] leads us to obey God’s government [rule]. Science helps us learn new wonders. Science soars high, and it also explores deep ideas. But science does not disagree with God’s Word. People who lack true wisdom may try to use science to support their false views of God. But the book of nature and the written Word throw light upon each other. So, we are led to love and honor the Creator and to have a wise trust in His Word.”—Adapted from Ellen G. White, *Patriarchs and Prophets*,⁴² pp. 115, 116.

DISCUSSION QUESTIONS:

- ❶ As a class, share your answers to Sunday’s last question. What can you learn from one another’s examples?
- ❷ What can be done to help someone who believes that science does not agree with the Bible? How can you help?
- ❸ If you are willing, share with the class the power that the mind has had over your body and health. What have you learned that could help others? How can prayer, Bible study, witnessing, and serving the needs of others help you heal mentally and physically?

³⁸ministry—work done for God.

³⁹geology—the study of the earth’s crust and the way its layers were formed; geology also is the study of rocks and fossils. Fossils are the remains or bodies of plants and animals in rock layers.

⁴⁰guesswork—a judgment or a decision that is made without having enough facts to know the truth for certain.

⁴¹foundation—the basis on which an idea or belief rests.

⁴²patriarchs and prophets—early Bible leaders such as Abraham and Isaac; older leaders of Israel; prophets are men or women sent by God to warn us about what will happen in the future.