

LSI Journal

*a forum for diverse views
consistent with Scripture*

Creation-Evolution Q&A



The Lutheran Science Institute, inc. (LSI)
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A Forum for Diverse Views Consistent With Scripture

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Creation-Evolution Q&A (Warren Krug; April-June 2013)

This article was emailed to most WELS/ELS pastors in May 2013. A large number of positive comments were received regarding this paper. It was published in the LSI Journal in five parts during 2013 and 2014.

Cover photo: trilobite reproduction from the fossil collection of LSI member Mark Bergemann.

Trilobite: an extinct arthropod

Trilobite means “three lobes” for the three body parts of these marine creatures. There are thousands of known trilobite species. Their fossils range in size from less than ½ inch to nearly 2.5 feet, and are found worldwide. Many people think of trilobites as simpler than living creatures, yet they are no less complex than similar arthropods alive today.

The trilobite specimen in this photo is a reproduction. Accurate trilobite reproductions can command up to half the price of an actual trilobite fossil. Accurate reproductions can be a good value for classroom use. One must look close to see tiny imperfections from molding poor reproductions, while good reproductions are often very difficult to differentiate from actual fossils. This specimen in this photo is 5 inches x 4 inches. It was purchased from a vendor receiving fossil reproductions from Morocco, where many reproductions are manufactured.

Creation-Evolution Q&A

by Warren Krug, M.S.Ed.

Christians often have questions regarding science issues, especially when they see a contradiction between what they hear from scientists or science teachers and what they have read in the Bible or heard in church services. It is the position of the Lutheran Science Institute (LSI) and the author of this paper that the Holy Bible is perfect and inerrant in all matters, including those that relate to science. In an effort to help resolve such issues I have here provided some questions Christians often ask and what I and others feel are reasonable answers, answers I pray might be helpful in resolving any problems that may be troubling some Christians. However, this paper is not intended to be an exhaustive treatment of the subject by any means. The footnotes contain internet addresses (URLs) of several web pages for purposes of documentation and which will in many cases provide additional information. (In discussing science, I do not in any way imply that science can ever supersede God's Holy Word in helping us know the truth about creation.) *A disclaimer: LSI does not necessarily agree with every statement on those web pages, especially those on secular sites.*

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1. Haven't scientists shown the earth to be much, much older than the Bible teaches?

Various Bible scholars such as Bishop Ussher (1581-1656) have attempted to arrive at an age of the earth by examining the various genealogies in the Bible, such as those in Genesis chapters 5, 10 and 11. While these scholars do not agree on the exact age, all who are faithful to the text of the Bible arrive at a figure of a few thousand years. Prof. John Brug has suggested that the absolute maximum age of the earth cannot be more than 12,000 years.¹ This is not to say that the world is that old, for based on the genealogies it is likely much closer to 6,000 years old.

On the other hand, secular scientists have concluded that the earth is no less than 4.5 billion years old. They claim that this date is based in large part on a method of dating rocks called radiometric dating. Scientists know that certain radioactive elements in rocks will over time decay into other elements; for instance radium into lead or potassium into argon. The original elements are called parent elements and the newer ones are referred to as daughter elements. Scientists can determine the decay rates of these elements, and they use this information to date the age of the rocks which contain those elements. Using this method, scientists have arrived at millions and billions of years as the age for some rocks.

The problem with radiometric dating is that this method rests on at least three assumptions which cannot be verified: first, that scientists can know how much parent element and daughter element, if any, were in the rock when it was first formed; second, that the decay rate has not varied since the rock was formed; and third, that nothing else has altered the amount of parent and daughter elements during the time the rock was in the ground. A failure in any one of these three assumptions would yield false dates.

Some historical events and discoveries have indeed shown radiometric dates can be seriously in error. For instance, rocks formed from lava flows at Mt. Ngauruhoe in New Zealand in 1954 have been dated as being 3.5 million years old. Rock at the top of Grand Canyon, formed by a volcanic eruption in recent times has yielded an age of more than 1 billion years!² It is also true that measuring the same material with different tests will often produce quite different ages. The RATE project, a major scientific effort by a group of creationist scientists (scientists who accept Genesis as being literally true) which was designed to test the reliability of radioactive dating has found the evidence supports a young age for the earth.³

There are many scientific "clocks" that produce dates far younger than 4.5 billion years. If the earth were this old, then there is too much carbon 14 in diamonds and the strata, too much helium in minerals, not nearly enough salt in the oceans, too much pressure in oil fields, and too little meteorite dust in the earth's strata. Moreover, the moon is too close to the earth, our planet has too strong of a magnetic field, the shape of the earth and its continents is all wrong, and the earth's rotation on its axis is slowing down too fast.⁴ So, there are good reasons to be suspicious of radiometric dating.

¹ John D. Brug, "Origins of (accessed May 13, earth and People," *Forward in Christ* 86:12 (December, 1999), <http://www.wels.net/news-events/forward-in-christ/december-1999/origins-earth-and-people> (accessed May 13, 2013).

² Andrew A. Snelling, "Radiometric Dating: Problems with the Assumptions," *Answers in Genesis* (September 2, 2009), <http://www.answersingenesis.org/articles/am/v4/n4/assumptions> (accessed April 30, 2013).

³ "Radioisotopes and the Age of the earth (RATE)," *Institute for Creation Research*, <http://www.icr.org/rate> (accessed April 27, 2013).

⁴ "What is the true age of the earth?" *Institute for Creation Research*, <http://www.icr.org/age-of-the-earth> (accessed April 26, 2013); cf. also Warren Krug, "The Age of the earth – Part 2," *LSI Journal* (2009), <http://www.lutheranscience.org/2009-AgeofEarth.html>; cf. also Warren Krug, "Days Keep Getting Longer, Longer," *LSI Blog* (July 4, 2012), <http://www.lutheranscience.org/12-07-04.html> (accessed April 26, 2013).

2. Can't the creation "days" be interpreted as representing long ages?

Some Bible scholars who wish to accommodate the long ages of evolutionary theory refer to 2 Peter 3:8 (“**With the Lord a day is like a thousand years...**”) as giving them permission to interpret the creation days as representing very long time periods. Of course, these scholars usually don't quote the rest of that verse (“**...and a thousand years are like a day**”) which tends to destroy their argument.⁵

Although the word “day” can have more than one meaning, it is obvious a normal day of approximately 24-hours (Hebrew *yôm*) is intended for each of the six creation days. When combined with a numeral as it is in the creation account, *yôm* means a normal day, as does the phrase “evening and morning.” Some people say these days can't be normal days because the sun wasn't created until the fourth day. However, this argument is irrelevant because “day” is a measure of time, and the sun in this context merely serves as a marker of time for humans who weren't created until the sixth day.

3. What is the “gap theory” and is it legitimate?

Some people believe there is a long period of time between Genesis 1:1 (“**In the beginning God created the heavens and the earth.**”) and Genesis 1:2 (“**Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters.**”) In general, they seem to allow for this gap in order to accommodate the billions of years that secularists believe the earth has existed. Supposedly during this gap period the geological ages took place and most of the fossils including those of ape-men were formed. It is also believed that near the end of the period Satan rebelled, causing God to not only eject him from heaven but also to destroy the earth, leaving our world “formless and empty” and “dark.” However, when this gap period ended, the six days of creation are said to have begun as God went about re-creating the universe.

Obviously, there is not a smidgen of evidence in nature or the Bible for this idea. Those who hold to it though believe Genesis 1:2 should read, “Now the earth BECAME formless and empty,” suggesting our planet already had a history prior to Genesis 1:2. However, conservative Bible scholars say the Hebrew word *hayah* used in Genesis 1:2 is a verb of “being,” almost always translated as “was” and never as “became.”⁶ Consider also Exodus 20:11: “**For in six days the Lord made the heavens and the earth, the sea, and all that is in them, but he rested on the seventh day.**”

The only reason for accepting either the gap theory or the “long creation days” idea is to accommodate secular science's views regarding an old earth. When one becomes convinced that the scientific arguments for an old earth are shaky at best, these two theories have no appeal.

4. What theological problems are encountered in theistic evolution?

Theistic evolution, the idea that God used the process of evolution to create the world and its creatures over millions and billions of years, poses serious theological problems. Sadly, many denominations and churches seem to have accepted this theory. However, if evolution is real, then the creation account in Genesis is not a true account of our origins. It also means it is not a true account of how sin entered the world. Adam and Eve were not real people. They cannot be blamed for the first sin if they didn't even exist.

⁵ “What We Believe: Questions and Answers: The Length of Creation,” Wisconsin Evangelical Lutheran Synod (2013), <http://www.wels.net/what-we-believe/questions-answers/creation/length-creation> (accessed April 27, 2013).

⁶ Russell Grigg, “How Long were the Days of Genesis 1?” *Creation* 19 (1) 23-25, 1996, <http://creation.com/how-long-were-the-days-of-genesis-1> (accessed April 27, 2013).

Darwinian evolution is a progressive process with better, more advanced humans slowly emerging out of the animal kingdom. There is no point in the evolution process at which we can say sin entered the world, and this conflicts with Genesis. If we are evolving into more advanced creatures naturally, it would seem we should not be held accountable for our sins – if we indeed have any sins – because we are getting better on our own. If evolution were true, it would be easy to conclude that we don't need a Savior. Theistic evolution *must* also define death as one of God's greatest creation tools, a good and necessary thing. Yet, the Bible defines death as the "wages of sin" (Romans 6:23) and an enemy "to be destroyed" (1 Corinthians 15:26).

The Bible paints an entirely different picture of our history than does theistic evolution. The human race was created holy, then fell into the deep abyss of depravity when Adam and Eve sinned, and it can be pulled up only by Jesus Christ. St. Paul accepted Adam as a real person whose disobedience brought sin into the world when he wrote, "Therefore, just as sin entered the world through one man, and death through sin, and in this way death came to all men, because all sinned" (Romans 5:12). He also wrote, "For as in Adam all die, so in Christ all will be made alive" (1 Corinthians 15:22), which suggests that if Adam was not real, then neither is Christ's work of saving us.

Looking at theistic evolution rationally means that God used the extremely lengthy and painful survival-of-the fittest process to create living creatures, eventually including us humans. An intelligent God of order and planning is thereby reduced to an extremely wasteful inventor who takes an inordinate amount of time to do what he could have done (and did do) in a short time. Theistic evolution is illogical and, as we shall see, is beset with most of the same scientific problems as atheistic evolution. It is also true that if we can't trust Genesis as being a true historical account, then we may have doubts about other portions of Scripture such as the miracles, the resurrection of Jesus, and the Gospel itself.

5. What is the mechanism by which evolution is said to work?

Evolution is supposed to be able to create new organisms by means of natural selection and mutations. Nobody doubts that mutations cause changes in genes which can indeed lead to differences in creatures. Natural selection (a.k.a. "survival of the fittest") then "chooses" those creatures which are better able to survive. The idea is that over time natural selection will tend to produce better, more advanced creatures which pass on the improvements to their descendants – hence, molecules-to-man evolution.

However, natural selection is not the same as evolution. Natural selection can be observed whereas evolution cannot. For instance, the story is told that in England at the start of the Industrial Revolution there was a light-colored species of moth (called a peppered moth) which blended in with the light-colored bark of the trees on which it rested. Predatory birds had a hard time seeing them because of the camouflage, so very few of them were eaten by the birds. Then, when smoke-producing factories were built, pollution in the air caused the light tree bark to darken with soot, thus exposing the light-colored moths and making them easy prey for birds. At that point the dark-colored peppered moths began to dominate because they blended in much better with the dark tree bark which afforded them more camouflage. This story may be an example of how natural selection can lead to changes, but it isn't evolution. The two varieties of moths are still peppered moths, and both varieties of moth did exist before the Industrial Revolution. No new creature evolved.⁷

As for mutations, only in rare cases are they beneficial to an organism⁸, and the so-called beneficial genetic mutations usually seem to have a downside. For example, a small group of villagers in Ecuador

⁷ John D. Morris, "What About the Peppered Moth?" *Institute for Creation Research*, <http://www.icr.org/article/what-about-peppered-moth/> (accessed May 9, 2013)

⁸ Georgia Purdom, "Feedback: Are There Beneficial Mutations?" *Answers in Genesis* (April 25, 2008), <http://www.answersingenesis.org/articles/2008/04/25/feedback-beneficial-mutations> (accessed May 4, 2013)

have experienced a genetic mutation which protects them from diabetes and cancer, but it stunts their growth, making them more vulnerable in a physical confrontation with normal-sized people.⁹ Because mutations which are significant enough to be noticed are almost always harmful to organisms, mutations are not a friend to the theory of evolution.

Dr. John C. Sanford, a highly regarded former professor of genetics at Cornell University, has written a book entitled *Genetic Entropy & the Mystery of the Genome*.¹⁰ (Question 10 below has more to say about “entropy.”) In this book Dr. Sanford discusses the net negative effect mutations are having on our species. As harmful mutations build up in our genes, often to be passed on to our descendants, we are not getting better or healthier as a species but weaker. If his idea is correct, then we are degenerating, not evolving! Some support for this idea can be seen in what appears to be an increase in developmental diseases in recent times.¹¹

6. Can we conclude that no species has ever changed into a different species?

Not the way *species* is currently being defined. The term *species* as it is used today is the lowest rank of the classification system which proceeds from *species* to *genus* to *family* to *order* to *class* to *phylum* to *kingdom* to *domain* all the way up to *life* itself (the “order of taxonomy”). The technical term *species* is defined as “related individuals that resemble one another, are able to breed among themselves, but are not able to breed with members of another species.”¹²

The word “species” is not found in any of today’s English bibles. However, the word apparently originated in Jerome’s Vulgate (fourth century Latin) and has been used in some other translations.¹³ In these cases *species* is always intended to stand for the word modern English bibles translate as *kind*, as in “according to their kinds” (Genesis 1). Bible scientists believe *kind* is a broader term than how scientists define *species* today. Most creationists no longer insist on any “fixity of species” because *species* has changed into a more narrow classification than the term which is actually used in the Bible. Knowing this helps clear up some misunderstandings regarding the belief that one species can’t change into another.

The Word of God makes it clear that every living thing reproduces according to its own “kind.” In this way the Bible rules out any possibility that one *kind* of creature could ever evolve into a completely different *kind* of creature. There is uncertainty as to how to divide current creatures into the “kinds” which God originally created or which left Noah’s Ark (a field of study known as baraminology). Still, the original ancestors of all creatures and the animals which left Noah’s Ark must have had rich genes which contained all the information needed for the wide variety or diversity seen today among their descendants. In other words, it is conceivable that there was just one pair of dog-like animals that left the Ark from which all the varieties of dogs and dog-like animals such as wolves and coyotes descended. Creation geneticists have no problem with this scenario.

Evolutionists will claim to find examples of evolution occurring in situations where a species may diverge into two similar creatures which can no longer interbreed. This, they say, is evolution. But even so, it is not Darwinian evolution! The two resulting living organisms still fall within the limits of the biblical *kind* and won’t ever change into an organism that is a completely different kind of creature. One species may change into another species over time, but it would simply be another species of the same kind of creature.

⁹ Warren Krug, “Mutation Helps Some Ecuadoreans Live Longer,” *LSI Blog* (February 18, 2011), <http://www.lutheranscience.org/11-02-18.html> (accessed April 30, 2013).

¹⁰ John C. Sanford, *Genetic Entropy & the Mystery of the Genome* (Lima, NY: Elim Publishing, 2005), <http://www.amazon.com/Genetic-Entropy-Mystery-Genome-Sanford/dp/1599190028> (accessed April 30, 2013).

¹¹ Warren Krug, “Developmental Disabilities on the Rise,” *LSI Blog* (May 25, 2011), <http://lutheranscience.org/11-05-25.html> (accessed April 30, 2013).

¹² “Species,” *Dictionary.com*, <http://dictionary.reference.com/browse/species?s=t> (accessed April 30, 2013).

¹³ Bodie Hodge, “Fixity of Species,” *Answers in Genesis*, <http://www.answersingenesis.org/articles/2009/03/16/fixity-of-species> (accessed April 30, 2013).

One kind can never change into another kind. The Genesis phrase “according to their kinds” rules that idea out, and we do not observe any exceptions in nature.

One might wonder how it is even possible to classify living organisms into a species, genus, family, etc., if evolution were true. As far as we know, natural selection and mutations have always been with us and always been available to cause changes in creatures and populations. Theoretically then, life should be more or less of a continuum from single-celled organisms to humans rendering it impossible to classify organisms into groups. Charles Darwin himself recognized this situation when he wrote:

The number of intermediate varieties which have formerly existed on earth must be truly enormous. Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain; and this, perhaps, is the most obvious and gravest objection which can be urged against my theory.¹⁴

7. Isn't genetics a key to evolution?

An organism's genes or genome is like a blueprint that determines what it will become. For the organism to change into something else, its descendants must experience an actual change in this blueprint. However, all evidence indicates that any outward change or variation seen in organisms is the various genetic expressions that are strictly limited to each “kind” of animal and not actual genetic change.

Scientists sometimes speak of two types of genetic variation and change: *microevolution* and *macroevolution*. Microevolution relates to the variations (see Question #6) observed within a created kind and which falls within God's original genetic limits. These variations can be observed and can only lead to new varieties within the original kind, but in no case is new genetic information added. Beneficial new varieties have been selected for in nature and in human agriculture to provide better crops and herds. The many varieties of dogs is a good example of microevolution. Different types of dogs show lots of outward variations which were all contained within the original genome of the dog “kind” of animal but do not show any new genetic changes containing added information. All dogs still remain dogs and are generally capable of interbreeding when size permits. This type of so-called “evolution” Darwin actually observed in his finches; however, all his finches were still finches. In fact, microevolution is not evolution at all as most people think of it!

The other type of “evolution” is referred to as *macroevolution* — the idea that one kind of organism can change into an entirely different kind of organism. This is what most people generally mean by the word “evolution,” and it's what Darwin incorrectly believed to be possible. It requires there to be no limits as to how much a genome can change genetically over time. However, there is no convincing evidence for this type of evolution occurring in the past nor happening in the present. Using the dog example above, there is not a single example of a dog which is on its way to becoming something that is not a dog.

For any single-celled organism to have evolved into a human via macroevolution (i.e., Darwinian-style evolution), a lot of new genetic information would have had to have been added to the genes of the organism as it evolved from a single cells into a human being. It's like going from the blueprint for a simple doghouse to the blueprint for the Pentagon! The problem is that there is no known way for nature to add this new information nor for new genetic information to be added spontaneously. Information can be lost or scrambled due to mutations, but it is not clear how new information can be added to a genome. Alleged examples of evolution generally involve a *loss* of information, such as the cave fish which lost not only its eyesight but also its eyes.

When stories about genetic changes observed in animals are reported in the news as if they were examples of evolution, these reports invariably describe microevolution. These stories only mention

¹⁴ “Anti-evolution Quotes,” Northwest Creation Network, <http://www.nwcreation.net/evolutionquotes.html> (accessed May 8, 2013)

changes in features or ways of doing things and never mention any new type of animal coming into existence – because none has!

8. How do evolutionists explain the origin of life?

They really can't. The idea that life can come from non-life is known as *abiogenesis* or "spontaneous generation." Science has come a long way from the days when it was believed rotting meat begat flies, but the problem of explaining how abiogenesis is possible remains scientifically unsolved. The online encyclopedia Wikipedia says, "There is no 'standard model' of the origin of life."¹⁵ Darwin assumed that abiogenesis was true, and the fact that it has never been demonstrated has not discouraged those scientists who are convinced of the truth of evolution that it someday will be.

Probably the most famous attempt to create life is known as the Miller-Urey experiment. In this project a sealed glass apparatus was filled with gases (methane, ammonia, hydrogen) which were assumed to be necessary for life to have formed on the early planet earth. In another part of the apparatus, water was heated to boiling in order to form water vapor and represent earth's early ocean. Then a high voltage electrical current was sent into the gases to represent lightning on the early earth. After several attempts some simple amino acids were formed but no living cells. Amino acids are necessary for life on earth, but fewer than half of the 20 amino acids required for life were formed in this experiment. There were other problems as well, but the bottom line is that life was definitely not produced from non-life in this experiment.¹⁶

If there were a logical natural explanation as to how living organisms could spontaneously appear on earth all by themselves, then some thinkers wouldn't seriously be proposing that life originated on some other planet and was transported to earth – an idea known as *panspermia*. But panspermia just shoves the problem of abiogenesis farther out into space without really explaining it. On the other hand, there is a scientific law known as *biogenesis* which states that life can come only from other life. This is a well-accepted truth for Christians who understand that we have been given the gift of life by our living and loving Creator.

9. Hasn't the fossil record demonstrated Darwinian evolution?

Fossils are the remains or evidence of once-living creatures now found in the ground. Evolutionists claim that they have found fossils of animals that are transitional forms between one kind of animal and another. If true, that would be evidence for evolution. However, these relatively rare so-called and assumed "transitional" fossils tend to be controversial even among the secular scientists. Since nobody was there to observe the now-fossilized creatures when they were alive, there is often no way to determine whether a so-called transitional fossil couldn't instead be a deformed specimen, an extinct animal, or simply a mistake in judgment. Fossils are often incomplete, and paleontologists (scientists who specialize in studying fossils) have to fill in the blanks by using their imaginations. Sometimes they put bones together which don't even belong to the same creature, as shown by the once popular Brontosaurus dinosaur, which we now know didn't even exist because the wrong head had been attached to the body of an Apatosaurus.

One group of fossils is especially devastating to the notion of evolution. The numerous fossils belonging to this group are known as "living fossils" because they look practically identical to their modern counterparts. Examples of living fossils include fish, crabs, cockroaches, spiders, crocodiles, and many

¹⁵ "Abiogenesis.", Wikipedia, <http://en.wikipedia.org/wiki/Abiogenesis> (accessed May 8, 2013)

¹⁶ Jerry Bergmann, "Why the Miller-Urey research argues against abiogenesis," *Journal of Creation* 18(2): 28-36, <http://creation.com/why-the-miller-urey-research-argues-against-abiogenesis> (accessed May 8, 2013); cf. also J. H. John Peet, "The Miller-Urey Experiment," *Truth in Science* (2005-13), <http://www.truthinscience.org.uk/tis2/index.php/component/content/article/51.html> (accessed May 8, 2013).

more.¹⁷ Evolutionists believe that they are fossilized animals and plants which lived hundreds of millions of years ago, and yet the descendants of those creatures have remained basically unchanged to the present day. So if evolution means change over long periods of time, then these fossils rebuke the notion of evolution because the plants and animals they represent have not changed in “hundreds of millions of years.” Especially interesting are living fossils such as the coelacanth which was assumed by evolutionists to have gone extinct millions of years ago as transitional forms only to be found alive today completely unchanged.¹⁸

What evolutionists really need to do is to display various series of fossils which show the gradual changing of any plant or animal into a completely different kind of plant or animal. This would be more convincing than merely reporting isolated examples of alleged transitional forms. For a while scientists thought that they had such a series in horses, but now DNA testing raises serious doubts about this assumed horse evolution series.¹⁹ The lack of any series of fossils showing the gradual transition of a plant or animal into a completely different kind of plant or animal must be considered a serious weakness in the theory.

Because fossils need to be buried rapidly before decay sets in, a global flood is a logical possible explanation as to why most of them exist. We will discuss this further in Question 18.

10. What is *entropy* and how does it affect the evolution theory?

The well-established Second Law of Thermodynamics or law of *entropy* states that over time available energy is lost to nature and systems tend to go from order to disorder. We can see the effects of this law all over the place. Buildings fall apart, living things die, machines break down and wear out, etc. If one takes a deck of playing cards organized in numerical order according to their suits and throws the deck down a flight of stairs, upon picking up the cards they will likely be very much out of order.

However, the theory of evolution requires nature to go in the opposite direction, from disorder to more order, as simple living things allegedly evolve into more highly organized creatures all by themselves. It's like throwing a disorganized deck of cards down the stairs and upon picking the cards up randomly finding them to be in perfect order. Evolutionists have a hard time explaining this apparent contradiction between a proven law of nature and their theory – but they still try.

One common rebuttal they use is to claim that in an open system energy is available from the outside to counter entropy. For example, the solar system is an open system which has a sun which continuously delivers energy to the earth. Seeds make use of this energy to grow into more highly organized mature plants. However, there is no chemical mechanism for converting the sun's light into structures the plant can use for growth and development. There is no such mechanism which links light from the sun to increased genetic order. In fact, plants are actually constructed so that sunlight *can't* alter their ability to keep on producing the next generation “after their own kind.”

The sun's energy did not create the programs in the seeds that allow them to sprout and grow into plants. The seeds require a Divine Designer, the God whom evolutionists reject. Their rebuttal can be easily challenged by asking them whether putting a frog in the sunshine will ever turn it into a prince. Even a snowflake, which evolutionists sometimes use as an example of more order proceeding from less order in nature, is dependent on how water molecules are designed.

¹⁷ “Examples of Living Fossils,” LivingFossils.com, http://www.living-fossils.com/3_1.php (accessed May 8, 2013)

¹⁸ “Coelacanth,” Wikipedia, <http://en.wikipedia.org/wiki/Coelacanth> (accessed May 8, 2013)

¹⁹ “DNA Sheds New Light On Horse Evolution,” *Science Daily* (December. 10, 2009), <http://www.sciencedaily.com/releases/2009/12/091210092001.htm> (accessed May 8, 2013)

11. Were dinosaurs real, and, if so, does the Bible mention them?

Considering the large number of bones of extinct reptilian creatures called dinosaurs which are found all over the world, it would be difficult to deny that dinosaurs once existed, and there is no reason to make such a denial. Many animals that once lived no longer exist today.

The Bible does not mention dinosaurs per se because the word “dinosaur” was not coined until 1841. However, the Book of Job does mention two fierce creatures whose descriptions do not match modern animals – the *behemoth* in chapter 40, which some Bible scholars think may have been a dinosaur of the Sauropod type, and the *leviathan* in chapter 41 which sounds like a prehistoric monster which spent time in the sea, perhaps a Kronosaurus. In addition, the Bible – particularly the KJV version – often mentions “dragons.” The many literary descriptions of dragons down through the ages closely match those of the larger dinosaurs. This raises the possibility that dragon stories and references, both biblical and non-biblical, may have originated from some real life interactions of humans with actual dinosaurs.²⁰

Bible scholars are not in agreement as to when the dinosaurs went extinct, with some believing that they did not survive long enough to make it onto Noah’s Ark. However, there is considerable evidence that they not only were on the Ark (perhaps juveniles which would not have been very large) but that they may have survived even into the Middle Ages. In any event, both the scriptural and the scientific evidence testify that dinosaurs and humans were at one time contemporaries, despite what evolutionists claim.

In 2005 a scientist by the name of Dr. Mary Schweitzer reported finding a Tyrannosaurus Rex bone containing tissue that was still soft and stretchy. She also said she could see what appeared to be blood vessels and red blood cells.²¹ Later, other dinosaur species were also found to have soft tissue. According to the evolution time-line, dinosaurs went extinct some 65 million years ago, but these discoveries seem to prove they survived into recent times. If it were not for secular science’s dependence on an old earth and the questionable radiometric dating system, nobody would believe that soft tissue could survive for millions of years without hardening or fossilizing.

Other evidence for dinosaurs having lived post-Flood include many ancient artifacts containing what look like depictions of dinosaurs. These artifacts include statues, pottery, decorations on a gate, and other artwork. One particularly interesting example is a Mesopotamian cylinder seal dated at 3300 B.C. which clearly shows what appear to be two sauropods necking, just as modern giraffes sometimes do.²² More recent examples include cave art drawn by North American Indians which feature animals resembling dinosaurs. There are stories of dragons from cultures all around the world, including the accounts of St. George the Dragon Slayer that date from the Middle Ages in Europe. It is not far-fetched to think these fables may well have been based, at least in part, on real life experiences with large dragon-like animals – dinosaurs.

²⁰ Warren Krug, “Dinosaurs in the Bible?” *LSI Blog* (March-August, 2000), <http://lutheranscience.org/2000-DinosaursInBible1.html> (accessed May 8, 2013)

²¹ Wieland, Carl, “Dinosaur soft tissue and protein—even more confirmation!” *Creation.com* (May 6, 2009), <http://creation.com/dinosaur-soft-tissue-and-protein-even-more-confirmation> (accessed May 8, 2013)

²² “Ancient Dinosaur Depictions,” *Genesis Park*. <http://www.genesispark.com/exhibits/evidence/historical/ancient/dinosaur/> (accessed May 8, 2013)

12. Were there really cavemen?

Down through the ages people have used caves for shelter. In the Bible, caves are frequently mentioned as places for habitation. Lot and his daughters lived in a cave (Genesis 19:30). David camped for a time in a cave (Judges 15) as did five other kings (Judges 10). Even today some people live in cave homes because they have found that the ground provides excellent insulation from heat and cold.

This, of course, does not mean that cavemen were brutish, grunting pre-humans. The evidence for that idea is scant, and such a belief conflicts with Genesis which leaves no room for pre-humans. Genesis teaches that Adam and Eve were created as intelligent beings. Of the so-called cavemen, Neanderthals are the best known. Recent research has uncovered interesting facts about these early humans. They had all the physical features needed to talk normally; they cooked their food; they wore make-up; they made tools as advanced as those of other humans of the time; and – most important of all – DNA evidence indicates that they interbred with other humans, confirming they are the same species or race as are we.²³ One computer rendering of a young female Neanderthal based on a specimen shows her with fair skin, red hair, and not looking much different from some young lady in your town.²⁴

13. What about human evolution?

Contrary to what some people still think, most evolutionist scientists do not believe humans evolved directly from apes. Instead they believe that there was a common ancestor from which humans and apes evolved separately. Secular scientists are on a mission to try to find this common ancestor in the fossil record; but Dr. David Menton says, “The field of paleoanthropology and the evolution of man is more fraught with controversy among its proponents than probably any other field of evolutionary studies.”²⁵

For example, a fossil known as Lucy (*Australopithecus Afarensis*) was for a long time considered to be a human ancestor, close to the historical point where the family tree of humans and apes supposedly separated. However, according to Dr. Menton, some Israeli scientists recently studied an *Au. Afarensis* specimen and have concluded that its jaw is too apelike to be considered an ancestor of humans. The reality is that the Lucy fossil consists of only 47 of the original 207 bones, and most of those bones are merely small fragments. So it is not surprising that artistic representations of what Lucy may have looked like vary widely, all the way from ape-looking to almost human-looking.²⁶ Similar stories can be told about other alleged human ancestors.

In an effort to prove the human evolution theory, mainstream science has been vulnerable to several hoaxes involving alleged human ancestors. We’ve all heard of the Piltdown Man, which turned out to be a forgery. Then there was the Nebraska Man which was – as it was eventually admitted – based on a single tooth, and that was the tooth of an extinct pig! Perhaps the most comprehensive and best researched book

²³ Warren Krug, “Neanderthals Live on in Modern Humans,” *LSI Blog* (July 25, 2011), <http://www.lutheranscience.org/11-07-25.html> (accessed May 8, 2013)

²⁴ “Computer-Assisted Paleoanthropology,” University of Zurich, <http://www.aim.uzh.ch/morpho/wiki/CAP/N3> (accessed May 8, 2013)

²⁵ Dr. David Menton, “Farwell to ‘Lucy’,” *Answers in Genesis* (April 18, 2007) <http://www.answersingenesis.org/articles/2007/04/18/farewell-lucy> (accessed May 8, 2013)

²⁶ Doug Henderson, “Bringing Lucy to Life,” *Answers* (January-March, 2013) <http://www.answersingenesis.org/articles/am/v8/n1/bringing-lucy-to-life> (accessed May 8, 2013)

on the subject of human fossils from the creationist viewpoint is entitled *Bones of Contention*. Just reading reviews of this book online can be very informative.²⁷

Obviously, apes in many respects look similar to humans, and much is made of the similarity in the DNA of these two creatures. However, the often reported 98.5% DNA similarity is exaggerated because it does not compare everything.²⁸ The differences between the two species are obvious. Humans can talk, are inventive, have a love for the arts, bury their dead, have a conscience, etc. Most important, only humans have an eternal soul and a need for the Savior. Adam and Eve were fully human, and the first promise of a Savior was made to them as representative of what would become the entire human race. There is no reason to doubt that the original ancestors of both humans and apes were created on the sixth day of creation, but they were created as separate ancestors who have reproduced according to their separate kinds.

14. Who was Cain's wife?

Bible skeptics have in the past tried (and sometimes succeeded) in making Bible believers look silly due to a lack of knowledge on the part of the Christians. One particular question is still sometimes asked, and not all believers have a ready answer: "Who was Cain's wife?" Cain did have a wife (Genesis 4:17), and yet the only named children of Adam and Eve – Cain, Abel and Seth – were all males. The solution to this puzzle is found in the fact that Genesis tells us that Adam and Eve had other children after Seth was born, both sons and daughters (Genesis 5:3). So, it is likely Cain married a sister or, less likely, a niece.²⁹

It wasn't necessary for there to have been another race of humans or semi-humans to have furnished Cain with a wife – ideas advanced by some people who don't accept Genesis as literal history.

Some people object to the idea that Cain may have married his sister. Aren't there laws against close relatives marrying, they remind us, because of the increased chance for producing children with biological deformities? Certainly that is the case today, but it doesn't mean that that was the situation in the earliest history of the world. God's law against close relatives marrying was not given until the time of Moses (Leviticus 18-20).

Down through the ages errors have been increasingly cropping up in the genes of people. These genetic errors are not the same for all humans, but the closer the relationship of father and mother, the greater the odds are that some mistakes will be the same. Physical deformities occur to children when both father and mother have the same errors in their genes. Thus, when there is not a close relationship, it is much less likely that the same error could be inherited from both parents and show up in their child(ren). In the case of the earliest humans such as Adam and Eve – who were created perfect – and their immediate descendants, there was far less time for these genetic errors to emerge, and therefore far less chance of a deformity even when very close relatives married.

²⁷ Marvin L. Lubenow, *Bones of Contention: A Creationist Assessment of the Human Fossils*, http://www.amazon.com/Bones-Contention-Creationist-Assessment-Fossils/product-reviews/0801065232/ref=dp_top_cm_cr_acr_txt?ie=UTF8&showViewpoints=1 (Grand Rapids: Baker Books, 2, 1992, 2004). (accessed May 8, 2013)

²⁸ David DeWitt, "Greater Than 98% Chimp/Human DNA Similarity? Not Any More," *Technical Journal* (April 1, 2003) <http://www.answersingenesis.org/articles/tj/v17/n1/dna> (accessed May 8, 2013)

²⁹ Ken Ham, "Cain's Wife —Who Was She?" *Answers in Genesis* (September 13, 2007) <http://www.answersingenesis.org/articles/nab/who-was-cains-wife> (accessed May 8, 2013)

15. Is there any evidence for the “Big Bang”?

The Big Bang theory seems incredible. It proposes that around 14 billion years ago all the matter in the universe was compacted into a single point. Either this single point had no beginning or it popped up out of nothing – neither scenario being possible according to known scientific laws. According to this theory, for some unknown reason there was a violent explosion, and all the elements of the present-day universe came into being. A NASA article says that within one second there was a “sea of neutrons, protons, electrons, anti-electrons (positrons), photons, and neutrinos” with a temperature of 10 billion degrees! The universe has been cooling ever since, and the effects of that Big Bang can be observed in our expanding universe.³⁰

This is just a theory, of course, and will always remain a theory unless scientists eventually admit that it is impossible. There are a number of scientific problems that the Big Bang theory faces. A Florida State University website reports that three main problems with this theory are:

- (1) The horizon problem — Temperatures in every direction in the universe are too uniform to have been created by a Big Bang.
- (2) The smoothness problem — The galaxies and clusters of galaxies in the universe seem to require that they were created “in an incredibly smooth non-chaotic manner,” not by a chaotic Big Bang.
- (3) The flatness problem — The geometry of the universe is too flat to have likely been created by a Big Bang.³¹

There are many other scientific problems with the Big Bang as well, such as the fact there should be equal amounts of matter and antimatter in the universe as a result of the Big Bang, but scientists acknowledge there is way too little antimatter.³²

While the universe may indeed have expanded or still be expanding, this doesn't mean that it all began with a Big Bang. The Bible seems to suggest that the expansion of the universe is the result of a direct action by the Creator: “He stretches out the heavens like a canopy, and spreads them out like a tent to live in” (Isaiah 40:22; cf. also Isaiah 42:5 and 48:13). The idea that the universe is expanding is based on the “redshift” observed and measured in the light emitted by distant stars, but some scientists have shown that the redshift is not completely understood and there is much controversy about it.³³

Perhaps the biggest problem for the Big Bang theory is the observation that the universe is remarkably fine-tuned, suggesting that it seems to have been planned by some intelligence. This is not what one would expect from an unguided explosion. In order to get around the obvious fact that our universe had a Creator, some cosmologists have now come up with what they call the theory of the multiverse. The multiverse is the bizarre theory that there are many universes – so many that the law of averages made it possible for at least one of them (ours) to contain all the necessary ingredients for life to develop. Cosmologist Bernard Carr says: “If there is only one universe, you might have to have a fine-tuner.

³⁰ “The Big Bang,” National Aeronautics and Space Administration, <http://science.nasa.gov/astrophysics/focus-areas/what-powered-the-big-bang/> (accessed May 8, 2013)

³¹ “Big Bang Cosmology,” Florida State University, <http://www.physics.fsu.edu/users/ProsperH/AST3033/cosmology/BigBangProblems.htm> (accessed May 8, 2013)

³² Warren Krug, “An Earth Surrounded by Antimatter,” *LSI Blog* (August 5, 2011), <http://lutheranscience.org/11-08-05.html> (accessed May 8, 2013)

³³ Bill Worraker and Andrew C. McIntosh, “A different view of the universe,” *Creation Ministries International* (December, 2000), <http://creation.com/a-different-view-of-the-universe> (accessed May 8, 2013)

If you don't want God, you'd better have a multiverse."³⁴ But it is surely much more reasonable to believe that this universe appears to be designed for life because it *was* designed for life – by the Creator!

16. Is there life in space?

Evolutionists look at the billions of stars and imagine many of them have planetary systems similar to our solar system. On many of those planets they expect that life must surely have evolved as it did here on earth; and wherever life has evolved, the life in a goodly number of those cases must be intelligent.

As a result of this optimism, much effort has been expended to try to find evidence of this intelligent extraterrestrial life or life of any kind in space. An organization called SETI (Search for Extraterrestrial Intelligence) has spent millions of dollars over 30 years listening to sounds from space and trying to detect signals from an intelligent civilization. All their work to date has been fruitless. Meanwhile, astronomers have been finding a number of planets orbiting other stars and have been looking for hints of life on some of them. The best that these scientists have been able to accomplish so far is the discovery of a few planets which may be the right size and distance from their stars and also some planets which might have water.

However, because scientists have not been able to explain abiogenesis or spontaneous generation on our own planet, their confidence that it has happened elsewhere seems misplaced. To get started, life needs much more than water and sunlight. It needs a miracle. That miracle was performed on this planet by our Creator during the six days of creation when he brought all sorts of living creatures into existence, including mankind.

Just for the sake of argument: If intelligent life were to be discovered on some other planet, that would likely pose a serious theological dilemma for Christians. In the first place, the Word of God teaches that Adam's sin affected the whole of creation (Romans 8:22). It would seem unjust for intelligent beings on another planet to suffer and die because of the sins committed by our human race here on earth. More importantly, the Son of God came down from heaven into this world and assumed our human nature in order to atone for the sins of the people of this world (John 3:16). Jesus did not take on the nature of beings on other worlds, nor did he pay for their sins (if any). All this implies that there is no biblical reason either for believing that intelligent life exists in outer space.

17. Why is starlight a problem for creationists?

Some galaxies are so far away it that takes billions of years for their starlight to reach earth. Creation scientists do not seem to dispute these long ages, which are based on fundamentally sound, scientific principles and not on evolution. The problem that creationists face is explaining how this starlight can be so old if this universe is only a few thousand years old.

There have been several attempts to explain this enigma. Perhaps the easiest to understand is the "mature starlight" or "starlight in transit" idea. Just as Adam and Eve were created as mature humans and just as soil had to be created as mature soil in order to support the first plants, so God could have instantly created mature starlight that just seems to be millions and billions of years old. However, this theory is not without its own problems. Starlight contains information concerning events in the universe which appear to have occurred in the distant past, events such as stars which have changed their brightness or exploding supernovas. Some believe that it would reflect badly on God's honesty if he has put false information about

³⁴ Warren Krug, "A Universe Built for Us — A Science Magazine's Surprising Admission," *LSI Journal* (March-April, 2009), <http://lutheranscience.org/2009-BuiltForUs.html> (accessed May 8, 2013)

events that never happened into the starlight which we observe today. This suggestion also raises the question of what purpose God had for making young starlight appear to be so old.

Another proposed solution to this problem is that the speed of light may have been exponentially faster in the past, so that what now takes light billions of years in travel time may have taken only a tiny fraction of that time in the earliest days of the universe. Many creation scientists reject this explanation on the grounds that the speed of light is connected to other factors in nature such as the ratio of energy to mass. Therefore, any dramatic change in the speed of light could have had such harmful effects on nature that life itself might not have been possible. Other creation scientists have not yet completely abandoned this proposed solution and continue to research its possibility.

A third suggestion which seems to have more going for it is that time is not the same everywhere. As hard as it may be to understand, time could be proceeding much faster in deep space than it does on our planet. This could explain the difference between starlight travel time and time as we measure it on earth. In other words, billions of years could be taking place in deep space while only thousands of years are occurring on earth. This idea is based on Albert Einstein's theory of relativity and thus cannot be so easily dismissed by Bible skeptics³⁵ – but it is far from proven.

There are other possible solutions to the starlight problem, including simply understanding starlight as a supernatural creation that lies outside of the laws of nature – at least as we currently understand natural laws. As of now no definitive answer to this puzzle exists, but creation scientists are working on it.

18. What evidence is there for a global flood?

In addition to what we read in Genesis, there is a surprising amount of evidence that the earth once experienced a global flood. Dr. Duane Gish has identified more than 270 legends about a worldwide flood among cultures all over the world.³⁶ These stories, though varying in many details, generally depict the entire world being destroyed by water with a favored few being saved from the floodwaters in an ark or boat of some kind. As is the case in all the dragon legends, it is reasonable to conclude that all these flood stories may be based on an actual event which their common ancestors experienced. Certainly Noah's children would have passed on their Flood experiences to their children and grandchildren, which verbal accounts would in turn be passed down from generation to generation and eventually written down among the various people who descended from them. The Flood stories vary because many details would have gotten lost or would have been revised as people spread around the globe and time took its toll on accuracy.

Fossils also testify to a global flood. Many marine fossils have been found in mountainous areas far from the ocean, suggesting that flood waters once covered the mountains and carried the animals which would become fossilized there. The mere fact that the earth has so many fossils suggests that a major catastrophe like a global flood must have happened because the creatures must have been buried suddenly in order for them to have left their fossilized remains in the rocks. Otherwise, had they just lay on the ground after dying, scavengers would have come to devour their remains or else their remains would have decayed long before ossifying. So Noah's flood would quite readily explain how so many fossils were formed all over the earth.

Other possible evidence for a global flood includes suggestions that the various rock strata were laid down suddenly with no hint of erosion between the layers. According to standard evolution theories, the strata that we see (such as in the Grand Canyon) were laid down gradually with many millions of years between each stratum, leaving plenty of time for erosion between each layer. However, there is no evidence of erosion between the strata. As Genesis describes it, Noah's Flood could have laid them down

³⁵ Jason Lilse, "Does Distant Starlight Prove the Universe is Old?" *Answers in Genesis* (December 13, 2007), <http://www.answersingenesis.org/articles/nab/does-starlight-prove> (accessed May 8, 2013); cf. also Russell Humphreys, "Seven Years of Starlight and Time," *Acts & Facts* 30:8, <http://www.icr.org/article/seven-years-starlight-time/> (accessed May 8, 2013).

³⁶ A.J. Monty White, "Flood Legends: The Significance of a World of Stories Based on Truth," *Answers in Genesis* (March 29, 2007), <http://www.answersingenesis.org/articles/am/v2/n2/flood-legends> (accessed April 30, 2013).

within a short period of time. Dr. Steven Austin's work on the volcanic eruption of Mount St. Helen's shows how "old" geological features can be produced in a very short time.³⁷

Some people want to believe that Noah's Flood was just a local or regional affair. This theory disagrees with Scripture which says that God's plan was to destroy the whole earth with water, not just a small part of it (Genesis 6:13-17), and that the waters rose to cover even the highest mountains (Genesis 7:19) – an impossibility for a local flood. The local flood theory is also illogical because if Noah's Flood had been merely local, all that Noah, his family and the animals would have had to do to survive is to have moved uphill to a safer place.

19. Was Noah's Ark large enough to handle all the animals that would have boarded the vessel?

People who have a hard time picturing how all the animals could have fit on Noah's ark often make at least one or two basic errors. First, they underestimate the size of Noah's ark. It was actually quite huge! The Ark measured 300 x 50 x 30 cubits (Genesis 6:15), which is about 450 x 75 x 45 feet. It would have been taller than a three-story building and longer than one-and-a-half football fields. The volume would be equivalent to more than 500 standard railroad stock cars. It was far larger than the bathtub shaped boats which we often see pictured in cartoons or drawings for children.

Secondly, these people greatly overestimate the number of animals that would have been on board. According to Genesis, only land animals and birds were represented on the ark. As mentioned previously, even the larger dinosaurs could have fit on the ark, especially if they were much smaller juveniles. The marine species which survived the Flood must have found calmer areas in the generally turbulent waters. The Bible doesn't mention insects, but they take up very little space. Plants would have survived as floating vegetation or as seeds.

The biggest error in overestimating the number of animals on the ark is to equate the biblical *kind* with today's *species*. As I discussed in Question 6, creationist geneticists believe that *kind* is a much broader term than *species*, so far fewer animals would have been needed on the ark to fulfill God's command. In other words, it is conceivable that there was only one pair of canines, one pair of equines, one pair of felines, etc., all of which possessed all the genetic information to produce the various varieties of dogs, horses and cats that we see today. Some creation scientists believe that the biblical *kind* is roughly equivalent to today's *family* in the order of taxonomy. If so, there may have been only a few thousand animals on board.

20. Were there really ice ages?

Generally speaking, creationist scientists see evidence for only one Ice Age. Geological evidence for the Ice Age include the glaciers, the U-shaped valleys which appear to have been made by the glaciers, and till (deposits of fine and coarse material) made by glaciers as they travel over the ground. Because we still have glaciers today, the Ice Age must have occurred after Noah's Flood. Just as secular geologists are not in complete agreement regarding their theories of multiple ice ages (from 4 to 20), creationists do differ somewhat on the details of the Ice Age.

According to one scenario, not long after the Flood great ice sheets developed over Greenland and North America as far south as northern United States, Scandinavia, Germany and England. In the Southern Hemisphere, most of Antarctica was covered by another ice sheet along with ice caps on the mountains of New Zealand, Tasmania, the Andes Mountains, and some mountains in Australia.

³⁷ Steven A. Austin, "Rapid Erosion at Mount St. Helens," *Geoscience Research Institute* (Loma Linda, California: 1984), abstract published in *Origins* 11:2 (1984), 90-98, <http://www.icr.org/article/erosion-mount-st-helens/> (accessed April 30, 2013).

Ice never covered more than a third of the earth's land surface, even at its greatest extent, so there was plenty of warm dry land left on earth for the descendants of Noah. Human societies such as the Neanderthals may have lived near the edge of the ice sheet in Europe. The harsh climate and lack of sunshine may have led to diseases such as rickets that could have caused their somewhat rugged appearance. After 700 years or so, the Ice Age ended.

Noah's Flood offers a reasonable explanation for what could have caused the Ice Age. For ice to form on land, the oceans at mid and high latitude need to be warm and the land masses need to be cold, especially in summer. The oceans after the Flood would have been warmed by the addition of hot subterranean water and heat energy released through volcanic activity ("the springs of the great deep burst forth" [Genesis 7:11]). Volcanic dust from the eruptions would have reflected solar radiation back into space, causing low temperatures over land and leading to cold summers. The volcanic eruptions could have lasted for hundreds of years.

Perhaps there is a reference to the Ice Age in the book of Job: "The tempest comes out from its chamber, the cold from the driving winds. The breath of God produces ice, and the broad waters become frozen" (Job 37:9-10). If the creationist scientists are right, there will never again be another Ice Age like the one following Noah's Flood because there will never again be a flood like that one.³⁸

21. Is the story of Jonah a real historical event or a fable?

Jesus accepted Jonah as a real historical figure who indeed spent three days inside a big fish (Matthew 12:39-41). In fact, Jesus compared Jonah's three days inside the fish to the three days he himself would spend in the tomb after his crucifixion: "For as Jonah was three days and three nights in the belly of a huge fish, so the Son of Man will be three days and three nights in the heart of the earth." On the basis of this verse, a person might conclude that *if* the story of Jonah being swallowed by a big fish were not true, then neither was the death and resurrection of Jesus. Such a scary thought!

Considering that there is no other biblical account of a person being swallowed by an animal and living to tell about it, the account of Jonah is certainly a unique event. The Bible does not identify the type of sea creature that swallowed Jonah. Some possible candidates that have been suggested are a whale (blue or sperm whale), a shark (white or whale shark), a special fish prepared by God just for this one event, or some other now extinct sea creature. The whales and sharks mentioned all have mouths large enough to swallow a man. However, whatever it was that swallowed Jonah, God had to intervene long enough to make sure that no harm came to Jonah while he was inside the animal.³⁹ To believe in the Jonah account as an actual historical event is certainly biblical and not therefore unreasonable.

22. What is intelligent design and is it an idea Christians can accept?

Anybody who studies nature for very long has to be greatly impressed. Everything from the vast universe to a simple biological cell shows evidence of intelligent planning. For example, a woodpecker can bang away on trees without damaging its brain, thanks to the clever shock-absorbing features built into its head. Many people have wisely concluded that all the countless examples of clever features and practices seen in mere plants and animals are due to a superior intelligence who designed them. This theory is known as *intelligent design*.

³⁸ Don Batten et. al., "Chapter 16: What About the Ice Ages?" *The Creation Answers Book*, Creation Ministries International, <http://creation.com/images/pdfs/cabook/chapter16.pdf> (accessed March 5, 2013).

³⁹ Warren Krug, "What Swallowed Jonah?" *LSI Journal* (2010), <http://www.lutheranscience.org/2010-JonahsFish.html> (accessed May 8, 2013).

Evidence of intelligent design is seen in the growing number of examples of biomimicry.⁴⁰ Biomimicry is the practice of copying designs in plants or animals for use in human inventions. For instance, the seeds or burrs of the burdock plant once inspired an engineer to invent Velcro. The Japanese invented a bullet train, the fastest in the world, after studying the kingfisher bird. Engineers in Zimbabwe designed a modern office building with such efficient ventilation it doesn't need central heating or air-conditioning. But their invention could only have happened because they first had studied African termite mounds which had the ventilation system first. Thus it would seem completely unreasonable to credit the human inventors with using their wisdom in designing the human inventions while claiming that the plants and animals on which these inventions were based were *not* also intelligently designed.

Intelligent design is so obvious that some scientists a few decades ago began a movement called Intelligent Design (ID) to highlight the concept and use it to counter Darwinian evolution. They use evidence from various branches of science to buttress their ideas. Their plan appears to be to try to make intelligent design scientifically respectable so it might catch on in the mainstream scientific community. To do this though, they have to avoid not only mentioning the Bible but also identifying the Intelligent Designer whom we know as the God of the Bible. ID scientists are not necessarily Bible believers, and many seem to accept the long ages of evolutionism even while they are denying Darwinism. So, while Bible-based Christians may hope or even pray that Intelligent Design can help knock evolutionism off its lofty perch (so far ID has had only limited success), we cannot participate in the ID movement. Because it is not grounded in the Word of God, ID has absolutely nothing to say about our sins or our Savior.

23. If an intelligent God designed the world so well, why are there so many problems?

Nobody will deny that as well designed as the world appears to be there are nevertheless serious problems we must live with such as natural disasters and people acting badly. The Bible has the answer to this riddle. **"Therefore, just as sin entered the world through one man, and death through sin, and in this way death came to all men, because all sinned"** (Romans 5:12). Because of Adam's sin, every person born since then has inherited a sinful nature. This is why we have criminals in our world and why we find ourselves falling short of perfection. This is also why people get sick and die.

But what about natural disasters such as earthquakes and hurricanes? It appears that when sin entered the world, the entire universe had to suffer along with humankind. Mankind ruined God's perfect creation. St. Paul says: **"We know that the whole creation has been groaning as in the pains of childbirth right up to the present time"** (Romans 8:22). When God completed his creation on the sixth day and looked at everything he had made, he declared "it was very good" (Genesis 1:31). Now it is not so good anymore, and our sin is the reason. But wait! There is good news for all of us.

24. What else has God designed for us?

God has designed a plan for everyone that will restore the perfection which Adam and Eve enjoyed in the Garden of Eden before their downfall. **"God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life"** (John 3:16). Think about that for a moment. God sent his own innocent divine Son into this world to live perfectly in our place in order to provide us with his holiness (**"Do not think that I have come to abolish the Law or the Prophets; I have not come to abolish them but to fulfill them"** [Matthew 5:17]) and then to die innocently in our place to take away our guilt (**"He himself bore our sins in his body on the cross, so that we might die to sins and live for**

⁴⁰ Warren Krug, "Biomimicry," *LSI Journal* (2009), <http://www.lutheranscience.org/2009-Biomimicry.html> (accessed May 8, 2013).

righteousness; by his wounds you have been healed” [1 Peter 2:24]). He demands nothing of us in exchange.

Compare this Gospel truth to what the man-made religions of the world stress – how their followers must do many good works and make sacrifices to try to please their “gods.” However, the one true God has provided us with a gift that we do not need to earn. In fact, nobody can earn it. God gave us this unique plan of salvation which no human mind could have dreamed up. The Gospel in the Bible is the only road to heaven, and heaven becomes ours only through faith in the promises of God’s free salvation which Jesus won for our sinful human race. Jesus said, “I am the way and the truth and the life. No one comes to the Father except through me” (John 14:6).

Now, as we nurture our faith in Jesus through Bible study and through reception of the sacraments (Baptism and the Lord’s Supper), we can look forward to a beautiful future home which has been designed just for us and which will turn out to be a far superior home to the earthly home we currently inhabit.

Jesus once said “In my Father’s house are many rooms; if it were not so, I would have told you. I am going there to prepare a place for you. And if I go and prepare a place for you, I will come back and take you to be with me that you also may be where I am” (John 14:2).

Do you have any other evolution-creation or other science-religion questions?

Feel free to browse the website of the Lutheran Science Institute (www.LutheranScience.org) and our Facebook page www.FaceBook.com/LutheranScience You may also write or email us (office@LutheranScience.org) with your questions. We will be happy to answer your questions as best we can. May God bless you as you grow in faith!

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All quotations from the Holy Bible are from the New International Version.