

The Laws of Science

Question:

Why should we as Christians study science?

Answer (choose one):

1. So we can challenge the science teachers in our schools and universities about the origins of life.
2. So we can win arguments about creation vs. evolution.
3. So we can prove that the Bible is true.
4. So we can know more about God by what He has done in creation.

The answer is number 4, “*So we can know more about God by what He has done in creation.*”

RO 1:19 ...that which is known about God is evident within them; for God made it evident to them.

RO 1:20 For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse.

Romans 1:19-20 (NASB)

1Pe 3:15 ...Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect,
1 Peter 3:15 (NIV)

The apostle Paul states in his letter to the Romans that God’s eternal power and divine nature are clearly seen through His creation so that man is without excuse. However, note what the following professional science associations have to say about God and Science:

National Association of Biology Teachers

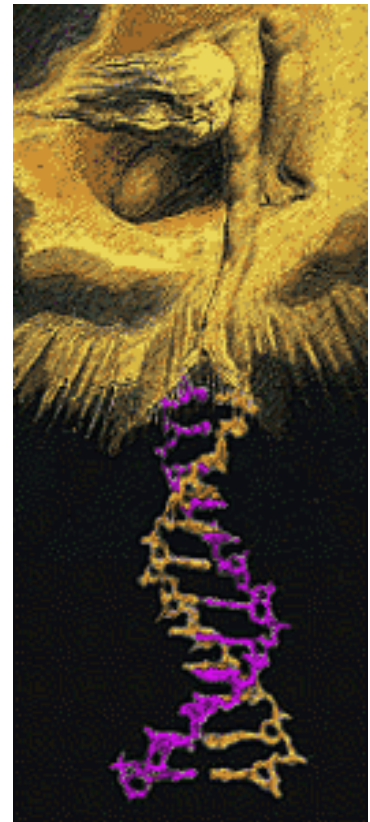
- “*Explanations or ways of knowing that invoke non-naturalistic or supernatural events or beings, whether called “creation science,” “scientific creationism,” “intelligent design theory,” “young earth theory,” or similar designations, are outside the realm of science...*” (6)

National Academy of Sciences

- “*Some object to it [evolution] on the grounds that evolution contradicts the accounts of origins given in the first two chapters of Genesis. Scientists have considered the hypotheses proposed by creation science and have rejected them because of a lack of evidence. Furthermore, the claims of creation science do not refer to natural causes and cannot be subject to meaningful tests, so they do not qualify as scientific hypotheses.*” (7)

National Science Teachers Association

- “*Policy makers and administrators should not mandate policies requiring the teaching of... ‘arguments against evolution.’*” (8)



Based on the statements above, what will their “excuse” be?

- What worldview are the above statements based on?
 - *Naturalism-Materialism-Evolution*
- What is the presupposition behind this worldview?
 - *That there is no God.*
Ps 10:4 In his pride the wicked does not seek him; in all his thoughts there is no room for God.
Psalm 10:4 (NIV)
 - *PS 14:1 The fool has said in his heart, “There is no God.”*
Psalm 14:1 (NASB)

INTRODUCTION

A Law is the highest-level science can achieve. Below Laws are Theories, and Hypotheses. The Scientific Method is the process by which data is collected, interpreted and validated.

- **Law is defined as:** a statement of an order or relation of phenomena that so far as is known is invariable under the given conditions. (10)
- **Theory is defined as:** a plausible or scientifically acceptable general principle or body of principles offered to explain phenomena. (10)
- **Hypothesis is defined as:** a tentative assumption made in order to draw out and test its logical or empirical consequences. (10)
- **Scientific Method is defined as:** principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses. (10)



Everything we observe in the universe operates according to known natural laws.

- If the truth of a statement is verified repeatedly in a reproducible way then it can reach the level of a natural law.
- Four well know and accepted natural laws of science are:
 1. The First Law of Thermodynamics
 2. The Second Law of Thermodynamics
 3. The Law of Cause and Effect
 4. The Law of Biogenesis

Many times in the creation/evolution debate, we hear or read the statement: *"Evolution is science and creation is religion."* Read the following statements:

American Geophysical Union

- *"'Creation Science' is based on faith and is not supported by scientific observations of the natural world. **Creationism is not science...**"* (9)

National Science Teachers Association

- *"Explanations that are not consistent with empirical evidence or cannot be tested empirically are **not a part of science.** As a result, explanations of natural phenomena that are not based on evidence*

but on myths, personal beliefs, religious values, and superstitions are not scientific.” (8)

Are these statements really true?

- To find out we will test each model (creation and evolution) against the four laws of science mentioned above to see which model is more “scientific.”
- We will also look at the scientific method and its limitations.

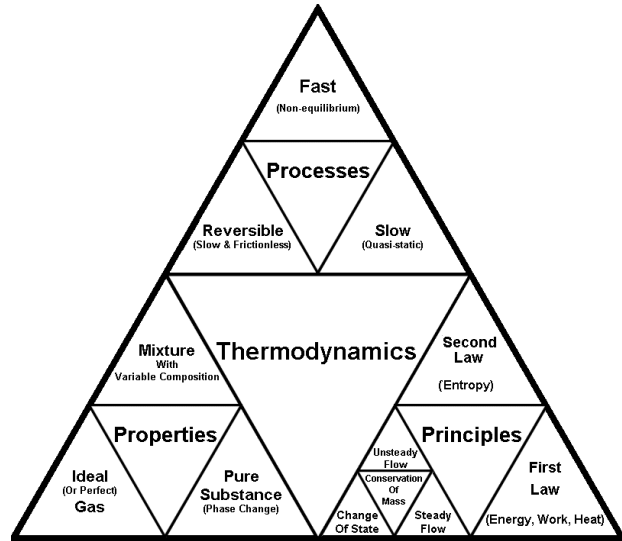
Definition and Nature of Science

- *“Science is a method of explaining the natural world.” (8)*

- This is a good definition of science.

- *“Science, by definition, is limited to naturalistic methods and explanations and, as such, is precluded from using supernatural elements in the production of scientific knowledge.” (8)*

- What is meant by “supernatural elements?” Isn’t the Big Bang supernatural? The origin of matter, or the origin of life cannot be explained in naturalistic terms, they require faith.



- *“Science assumes that the universe operates according to regularities that can be discovered and understood through scientific investigations.” (8)*

- The key word here is “assumes” and is just another way of saying, “we don’t know.” There are no naturalistic answers for questions such as: What was the first cause that caused everything else? Where did the matter come from? Where did energy come from? Why hasn’t the universe wound down? What is keeping it going?

- *“Scientific knowledge is simultaneously reliable and tentative.” (8)*

- How can something be both reliable and tentative? Tentative means uncertain.

- *“With new evidence and interpretation, old ideas are replaced or supplemented by newer ones.” (8)*

- This statement about science is well known. It seems like we constantly here the phrase “New evidence shows...” One year we are told that carbs are good; the next year we are told that carbs are bad. The fact is, science will never provide the answers people seek.

- Only the Bible is unchanging and reliable.

LK 21:33 “Heaven and earth will pass away, but My words will not pass away.

Luke 21:33 (NASB)

JN 17:17 “...Your word is truth.

John 17:17 (NASB)

The Scientific Method

Real science must conform to a system known as the scientific method.

We defined the scientific method earlier as: principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses. (10)

- This system provides a framework in which scientists can analyze situations, explain certain phenomena, and answer certain questions.
- The flow chart to the right shows the scientific method process.

When data is found inconsistent with a hypothesis, the hypothesis might be discarded, or it might be modified until it is consistent with all data that has been collected.

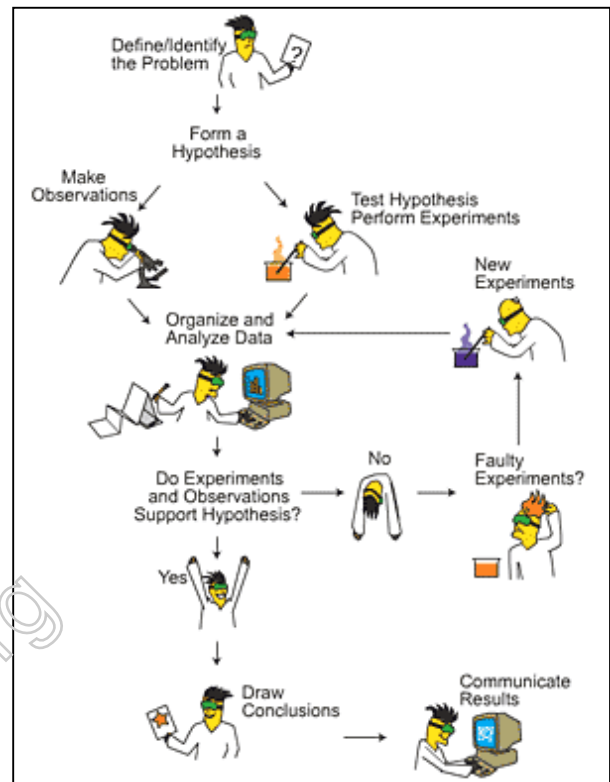
When a large amount of data is collected and the hypothesis is consistent with all of the data, then the hypothesis becomes a theory.

As more and more data relevant to the theory gets collected, the theory can be tested over and over again. If several generations of collected data are all consistent with the theory, it eventually attains the status of a scientific law.

Limitations of the Scientific Method

If a hypothesis survived scientific scrutiny and became a theory, and that theory went on through more scientific scrutiny and became a law, isn't it 100% reliable?...No, not at all.

- In order to test hypotheses and theories, scientists must gather data.
- In order to gather data, they must perform experiments and observations.
- Since these experiments and observations are designed and performed by imperfect people, the experiments might be flawed, the data collected might be flawed, and/or the data might be misinterpreted.
- As a result, even though there might be an enormous amount of data supporting a scientific law, if the data is flawed, the law is most likely wrong.
 - The following statement is made on NASA's website, "*Stellar evolution theory and observations of globular clusters (believed to contain the oldest stars in the galaxy) give estimates for the ages of the stars of 15-18 billion years. The distance scale measurements and big bang theory suggest the universe is 8-12 billion years old. Hence, either stellar evolution theory is incorrect, or how we measure distances is wrong.*" (20)
- In addition, it is simply impossible, even after centuries of experimentation, to test all implications of a scientific law completely. Thus, even though years and years of experimentation exist in support of a scientific law, some person somewhere will probably devise an experiment in which the data contradicts the law.
- The end result is that scientific laws can be demonstrated false when the experiments that support them are shown to be flawed, or when someone finds a new kind of experiment that contradicts the law (i.e. Spontaneous Generation and classic Darwinism/gradualism).



Scientists are certain that some of the things they are learning today will someday be proven to be wrong. That is the nature of science, as stated in the quotes above.

If scientific laws are not 100% reliable, what is?

- The only thing in the universe that is 100% reliable is the Word of God.
- The Bible contains truths that will never be shown to be wrong, because those truths come directly from the Creator of the universe.
- Those who put their faith in the Bible will never be disappointed, because it is never wrong.

BODY

There are only two possible explanations for how the origin of the universe and life came into existence, creation, or evolution.

- Since these two models are opposites, evidence supporting one model can be regarded as evidence against the other model.
- Lets look at the four laws mentioned earlier and see what model they support.

1. First Law of Thermodynamics

First Law of Thermodynamics: Matter and energy can neither be created nor destroyed.

All matter and energy in the universe is being conserved (the total sum is constant). Another way of stating this is: Nothing is now coming into existence or going out of existence; matter and energy may be converted one into the other, but there is no net increase or decrease in the combined total of what exists.

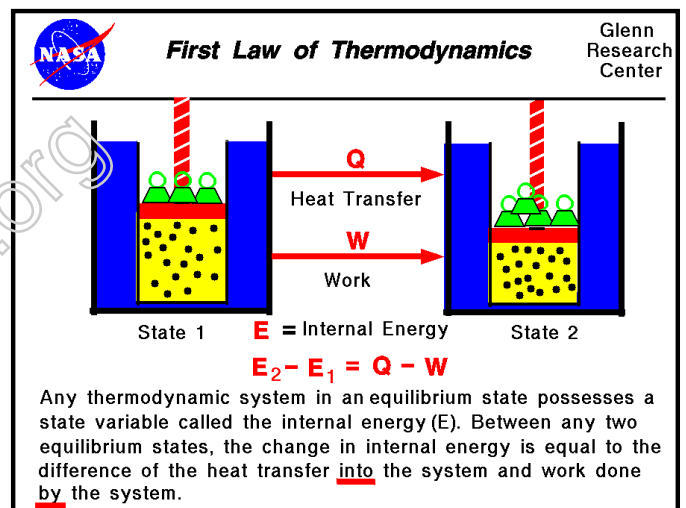
- Robert Gange, Ph.D., and research scientist states: *“The First Law teaches that a natural process cannot bring into existence something from nothing. If the First Law is correct, which seems to be the case, and if the universe had a beginning, which seems to be scientifically accepted, then one conclusion is that something unnatural created the universe....”* (11, pg. 18)

If matter and energy is neither being created nor destroyed in the universe, where did the original matter and energy come from?

- There is no known scientific process for how matter could come into existence from nothing.
 - This means that evolutionists rely on faith that the origin of matter somehow came into existence through some natural materialistic process.

Does the Bible agree with the first law of thermodynamics?...Yes

- The Bible does have an answer: *In the beginning God created the heavens and the earth.* As Christians, we accept this by faith.



Conclusion:

- The First Law of Thermodynamics shows that there is no physical process where matter or energy could come into existence from nothing.
 - Without evidence, evolutionists are left with a hole in their faith assertion that matter came into existence through some natural materialistic process.
 - This leads to the following deduction:
 - The Bible contains many miracles, but there is a miracle maker - God.
 - Evolution requires many miracles, but has no miracle maker.
 - Physicist and evolutionist Paul Davies states: “[The big bang] represents the instantaneous suspension of physical laws, the sudden abrupt flash of lawlessness that allowed something to come out of nothing. It represents a true miracle.” (12, pg. 161)
- Both models accept the origin of the universe by faith.

HEB 11:3 *By faith we understand that the worlds were prepared by the word of God, so that what is seen was not made out of things which are visible.*
Hebrews 11:3 (NASB)
- Clearly the model of evolution not only lacks a scientific explanation for the origin of matter, but it is also a faith that requires miracles, but has no miracle maker.


Evolution contradicts the First Law of Thermodynamics and Creation agrees with the law.

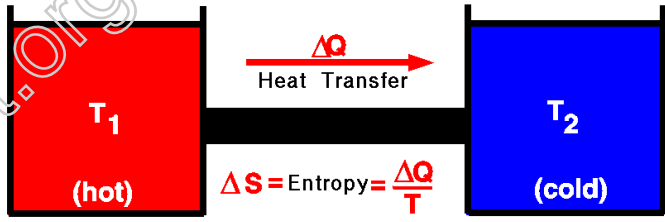
2. Second Law of Thermodynamics

Second Law of Thermodynamics: Energy goes from a state of useable energy to a state of less useable energy for doing work in an isolated system.

The second law of thermodynamics has many different relationships, such as:

- A measure of disorder.
- Usable energy is running out.
- Information tends to get scrambled.
- Order tends towards disorder.
- A random jumble will not organize itself.

**Second Law of Thermodynamics**Glenn Research Center



$\Delta S = \text{Entropy} = \frac{\Delta Q}{T}$

There exists a useful thermodynamic variable called entropy (S). A natural process that starts in one equilibrium state and ends in another will go in the direction that causes the entropy of the system plus the environment to increase for an irreversible process and to remain constant for a reversible process.

$S_f = S_i$ (reversible) $S_f > S_i$ (irreversible)

The second law teaches that everything in the universe is losing energy for doing useful work, or wearing out.

Going back to the definition of the second law, what is meant by the word “system?”

- A system can be anything we define it to be. For example, the earth is a system, and a human body is a system.
- There are two types of systems:
 1. **Open systems:** An open system can exchange both matter and energy with its surroundings. Matter and energy can be added to or taken out of the system.
 - The earth and our bodies are examples of open systems. Energy is constantly being added to the earth and our bodies from the sun. Each time we eat or drink we are adding energy to our bodies.

2. **Isolated systems:** An isolated system cannot exchange matter or energy with its surroundings. Absolutely no matter or energy can be added to, or taken out of an isolated system.
 - The only truly isolated system is the universe. Nothing comes into the universe from outside and nothing goes out of the universe, it is totally isolated.

The creationist's classic argument is that evolution violates the Second Law of Thermodynamics because the second law states that everything is running down, getting less complex and less organized.

- The model of evolution requires that everything is getting more organized and complex such as: the big bang expansion of the universe to cause order and complex structures such as stars, planets, and galaxies, lifeless chemicals organizing into a living cell, a cell evolving into a multi-cellular organism, a fish into an amphibian, reptiles into birds, and ape-like creatures into humans.
- The typical evolutionist's rebuttal is that evolution does not violate the second law because the second law only describes how energy operates in an isolated system and the earth is an open system.
 - Since energy (the sun) can be added to an open system (the earth), things can become more ordered and complex. Here are two examples of things becoming more ordered and complex:
 1. An animal embryo growing into a full adult.
 2. An acorn growing into a tree.
 - The second law only mentions working in an isolated system. Since we live in an open system, energy can be added allowing the embryo and the acorn to grow and become more complex. Therefore, evolution does not violate the second law.

Despite this argument, the model of evolution still violates the second law of thermodynamics. The addition of energy into an open system is necessary, but not sufficient to perform the work needed to build complex structures such as proteins and cells.

- In order for life to form and become more ordered and complex, four mechanisms are needed:
 1. An open system
 2. A source of energy
 3. A mechanism to capture and convert energy into a form useful for life
 4. A mechanism to utilize the converted energy for metabolic work

A Look at Mechanisms

A naturalist's argument that evolution does not violate the second law of thermodynamics does not address the following two mechanisms:

1. A mechanism to capture and convert energy into a form useful for life

If all we have is an open system and a source of energy, complex structures used in life such as proteins and DNA will not develop from simple molecules.

- There must be a mechanism available to capture the energy and specify its use.
 - All cells have a mechanism to capture, store, and transform energy. If this mechanism is not available, then the addition of energy alone will not result in life.
 - The development of simple molecules into complex structures and living organisms has never been observed.
- Without a mechanism to capture energy, no amount of energy input will cause anything to become more complex. If you can't capture it you can't use it.

2. A mechanism to utilize the converted energy for metabolic work

Once energy has been captured and transformed to potential chemical energy, there must be other mechanisms that utilize it to perform metabolic work.

- Without mechanisms to utilize the captured energy, simple molecules will not produce complex molecules such as proteins and DNA.

It Takes More Than Energy to Become More Complex

To build complex systems we must have mechanisms to capture raw energy, convert it into useful energy, and then be able to use the energy.

- What evolutionary force, or chance process, gave rise to the encoded information that instructs the synthesis of tens of thousands of molecular machines and coordinates their functions?
- Physicist and evolutionist Paul Davies states: *“Merely specifying a source of useful energy does not of itself offer an explanation for how the ordering process happens. To do that, one needs to identify the exact mechanisms that will couple the reservoir of available energy to biologically relevant processes.”* (13, pg. 54)

Now let's revisit the two examples supplied by the evolutionist which supposedly demonstrate that evolution does not violate The Second Law of Thermodynamics.

1. The animal embryo growing into an adult.
2. An acorn growing into a tree.
 - Both of these examples miss the question of how life first originated.
 - Both examples already contain the mechanisms for capturing and converting energy and utilizing it in life processes. The evolutionist must explain how these extremely complex mechanisms originated.
 - In both examples, the embryo and the acorn already contain immense amounts of information stored in their DNA. This information directs the development, growth, maintenance and reproduction of each organism.
 - The information in the DNA provides all the instructions for synthesizing all the molecular machines needed to carry out these processes. Where did DNA come from? Animals, humans, and plants (embryos and seeds) already contain the information that tells them how to capture and use the energy.
 - What about the fact that eventually the adult animal and the adult tree will wear out and die?

Conclusion:

- The model of evolution has no answer for where information came from or how complexity arose.
- The Bible exactly agrees with what we observe in the universe.
 - In Genesis chapter three (the fall), God places a curse on the ground.
GE 3:17 *...Cursed is the ground because of you;*
Genesis 3:17 (NASB)
 - In Romans we read that the whole of creation is under the curse.
RO 8:22 *For we know that the whole creation groans and suffers the pains of childbirth together until now.*
Romans 8:22 (NASB)
 - Even scientists recognize this fact. *“When considering the source of this information, we can now formulate the following theorem, which is based on research of many thousands of years: There is no known law of nature, no known process and no known sequence of events which can cause information to originate by itself in matter.”* (14, pg. 106-107)

Evolution contradicts the Second law of Thermodynamics and Creation agrees with the law.

3. The Law of Cause and Effect

Law of Cause and Effect: Every effect must have an equal to or greater than cause.



If every effect must have a cause, then what caused the original matter to suddenly begin expanding in the big bang? Where did the matter come from?

- Evolutionists have no scientific answer for this event/effect.
- Evolutionists assume that it happened based on unverified assumptions, but not by observable science.
 - The following statement is made on NASA's website: *"Although the Big Bang Theory is widely accepted, it probably will never be proved; consequently, leaving a number of tough, unanswered questions."* (15)
- Since the event was not observed, nor can it be repeated, evolutionists must ultimately rely on faith that it occurred and are forced to make statements such as:
 - *"To the average person it might seem obvious that nothing can happen in nothing. But to a quantum physicist, nothing is, in fact, something."* (16, pg. 35)
 - *"All matter plus all gravity in the observable universe equals zero. So the universe could come from nothing because it is, fundamentally, nothing."* (16, pg. 36)
 - *"First there is nothing – not time, not space, not even emptiness, since there is no space to be empty. Then, from this void, this utter nothingness so complete that no word can make it imaginable, springs...a universe, suddenly there, but far smaller than the smallest dust mote."* (22, pg. 12)
- Since the model of evolution does not allow for faith, materialists are left with the challenge to demonstrate how the Law of Cause and Effect can be in agreement with evolution. However, current theories are in direct conflict with statements such as this one found in the National Science Teachers Association position statement on evolution:
 - *"Explanations that are not consistent with empirical evidence or cannot be tested empirically are not a part of science. As a result, explanations of natural phenomena that are not based on evidence but on myths, personal beliefs, religious values, and superstitions are not scientific."* (8)
 - According to their own statement neither the origin of life, or the origin of the universe is science, but a myth, personal belief, or religion.

The Bible has an answer for the origin of the universe. Throughout the Bible there is a consistent answer that has never had to change.

COL 1:16 *For by Him all things were created, both in the heavens and on earth, visible and invisible, whether thrones or dominions or rulers or authorities— all things have been created through Him and for Him.*
Colossians 1:16 (NASB)

NE 9:6 *" You alone are the LORD. You have made the heavens, The heaven of heavens with all their host, The earth and all that is on it, The seas and all that is in them. You give life to all of them And the heavenly host bows down before You.*
Nehemiah 9:6 (NASB)

Thomas Aquinas (12th century monk from near Naples, Italy, 1225 – 1274) makes the following statement about the law of cause and effect: *“In the world of sense we find there is an order of efficient causes. There is no case known (nor indeed, is it possible) in which a thing is found to be the efficient cause of itself, because in that case it would be prior to itself, which is impossible. Therefore it is necessary to admit a first efficient cause, to which everyone gives the name of God.”* (17, pg. 13)

- **Translation...**Not only is it possible that God exists, but it is logically necessary that He exist for anything to exist at all.

The Bible teaches that God is the first great cause. The Bible has a miracle maker, God, Who called all things into existence by His great power.

Evolution again requires a miracle with no miracle maker. Evolution contradicts the Law of Cause and Effect and Creation agrees with the law.

4. The Law of Biogenesis

Law of Biogenesis: Life only comes from life.

This is a natural law of science. No one has ever observed an exception to this law.

- However, evolutionists claim that life arose from non-living chemicals about 3.5 billion years ago.
- This is strictly a matter of faith. Scientists have not even come close to being able to demonstrate how the basic building blocks of life (amino acids) could have assembled together in the correct order to make one single protein useful for life.



The Bible exactly agrees with this known law. God created all life.

JN 1:1 *In the beginning was the Word, and the Word was with God, and the Word was God.*

JN 1:2 *He was in the beginning with God.*

JN 1:3 *All things came into being through Him, and apart from Him nothing came into being that has come into being.*

John 1:1-3 (NASB)

Evolutionist and biochemist Klaus Dose sums up the situation about the origin of life in this statement: *“More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on earth rather than to its solution. At present all discussions on principle theories and experiments in the field either end in stalemate or in a confession of ignorance.”* (18)

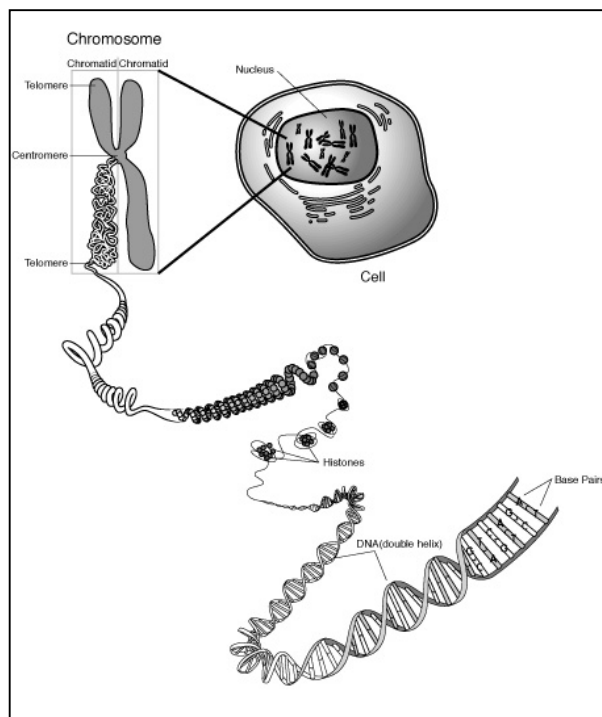
Evolution contradicts the Law of Biogenesis and Creation agrees with the law.

What is life?

Scientists have developed several criteria for life. If something meets all of these criteria, then scientifically it is alive. If it fails to meet even one of the criteria, it is not alive. These criteria are:

1. All life forms contain deoxyribonucleic acid (DNA).
2. All life forms have a method by which they extract energy from their surroundings and convert it into energy that sustains them.
3. All life forms can sense changes in their surroundings and respond to those changes.
4. All life forms reproduce.

Defining the criteria for life is important, but what about the question a step above that?...What is it that makes something alive?



What Is It That Makes Something Alive?

- If we chemically analyzed an organism, gathered together all of the chemicals contained in it and mixed them together, we would not have a living organism.
- Life is more than a collection of chemicals. The “*what*” that separates life from non-life is still a mystery to modern science.
 - Rodney Brooks, director of MIT’s Artificial Intelligence Laboratory makes the following statement, “*With the success of molecular biology explaining the mechanisms of life we have lost sight of the question one level up. We do not have any good answers at a more systems level of what it takes for something to be alive. We can list general necessities for a system to be alive, but we can not predict whether a given configuration of molecules will be alive or not.*” (19)
- As Christians the “*what*” that makes something alive is an easy question to answer.
 - It is the creative power of God.

GE 2:7 *Then the LORD God formed man of dust from the ground, and breathed into his nostrils the breath of life; and man became a living being.*
Genesis 2:7 (NASB)

PS 36:9 *For with You is the fountain of life;*
Psalms 36:9 (NASB)

PS 104:30 *You send forth Your Spirit, they are created;*
Psalms 104:30 (NASB)

ISA 42:5 *Thus says God the LORD, Who created the heavens and stretched them out, Who spread out the earth and its offspring, Who gives breath to the people on it And spirit to those who walk in it,*
Isaiah 42:5 (NASB)

HEB 1:3 *And He is the radiance of His glory and the exact representation of His nature, and upholds all things by the word of His power.*
Hebrews 1:3 (NASB)

Some creative power must be exercised in order to take lifeless chemicals and use the information in DNA to make a living organism. Of course, only God has such creative power, and that is why all life comes from Him.

Science will never be able to uncover the "*what*" that makes life possible.

- At some point in the future, scientists might be able to catalog every chemical that makes up a living organism.
- At some farther-off point in the future, scientists might even decode the information stored in DNA and determine all of the instructions necessary to form those chemicals into a living organism.
- Even after those incredible feats, however, science would be no closer to creating life.
- Without the creative power of God, lifeless chemicals will never become a living organism.

The Theory of Evolution, What is a Theory?

It is often maintained that evolution is a valid theory, even a fact in many textbooks.

- But what is a theory?
- What makes a theory valid?
- What level of confidence should we have in a theory?

We defined a theory earlier as: a plausible or scientifically acceptable general principle or body of principles offered to explain phenomena. (10) Theories must: make accurate predictions, not have any known contradictions, and be repeatable.

The theory of evolution however, is:

- Based on mutations (random occurrences), it cannot make dependable predictions.
- Happened in the past, it is not repeatable.
 - The origin of life, the big bang, or one species evolving into a new species, are all unobserved claims.

There are also many known contradictions with evolution in the areas of cosmology, the origin of life, and the fossil record, to name a few.

Does evolution really qualify as a theory?... It really qualifies more as a hypothesis or a model.

- Scientists, however, will take offence if someone says, "*evolution is just a theory.*" What is usually meant when this statement is made is that evolution is not a proven fact and should not be promoted as such.

How to Test a Scientific Theory

Since evolution does not, according to the definition, qualify as a scientific theory, how much confidence should we have in the model of evolution? How much confidence should we have in the model of creation?

To help explain the validity or confidence level of a scientific theory certain criteria can be applied. These criteria include:

1. The process for how the event occurred.
2. The number of assumptions involved.
3. The predictive capability.

1. The Process

What is the process, or mechanism, that could cause:

- The universe to come into existence?
- The complexity and organization in the universe?
- The origin of life?

Since evolution is claimed to be a scientific theory the answer must be found using scientific processes.

- However, the evolution model has no scientific answer to these questions, it is all speculation.
 - There are no scientific explanations for something from nothing. Conditions for this in the big bang theory are really nothing more than philosophical statements.
 - Concerning the origin of life itself the transition between lifeless chemicals and organized biological metabolism, there is no evidence at all.

Since evolution is based on materialism there is a hole in the model. What does this mean? It means the evolutionists rely on faith that somehow a process or mechanism will be discovered. In other words, the model of evolution fails the process test.

The creation model has a process to answer the questions for criteria 1...God.

- Even though this answer is a faith-based answer, it is a reasonable faith because the creation model agrees with the known laws of science.

Confidence Level for Criteria 1: The Process

- Evolution Low
 - There is no naturalistic process for the origin of matter, or life.
- Creation High
 - The creation model has faith in a miracle maker (God) and scientific research supports that the origin of matter and life require a Creator.

2. Assumptions Involved

The model of evolution makes many assumptions, to name just a few:

- The assumption that matter and energy can create themselves.
- The assumption that there was some first great cause that made the universe expand into existence.
- The assumption that life could come from lifeless chemicals.
- The assumption that the Second Law of Thermodynamics can be circumvented.
- The assumption that there is no God.
- The assumption that all things can be explained through naturalistic processes.

The model of creation makes one assumption. That God is the Creator and Sustainer of all things.

COL 1:16 For by Him all things were created, both in the heavens and on earth, visible and invisible, whether thrones or dominions or rulers or authorities— all things have been created through Him and for Him.

COL 1:17 He is before all things, and in Him all things hold together.

Colossians 1:16-17 (NASB)

Confidence Level for Criteria 2: Assumptions Involved

- Evolution Low
 - The model of evolution is almost entirely based on assumptions.
- Creation High
 - There is only one assumption made.

3. Predictive Capability

Since evolution is based on natural processes, chance, and vast amounts of time, the predictive capability is very low. Chance occurrences do not have predictive capability.

The creation model is based on a purposeful, Intelligent Designer-God.

RO 8:28 And we know that God causes all things to work together for good to those who love God, to those who are called according to His purpose.

Romans 8:28 (NASB)

EPH 1:11 also we have obtained an inheritance, having been predestined according to His purpose who works all things after the counsel of His will,

Ephesians 1:11 (NASB)

EPH 3:11 This was in accordance with the eternal purpose which He carried out in Christ Jesus our Lord,

Ephesians 3:11 (NASB)

Changeability

A subset of predictability is how often a model has to change. If a model is constantly changing, then how can we say it has a good capability to predict what we observe?

The model of evolution is an ever-changing model. It is constantly being refined, added to, and discarding ideas based on “*better understanding*.” For example, the evolution model once taught, and sometimes still teaches, that each of the following were facts supporting evolution:

- Ramapithecus, Piltdown man, Nebraska man.
- Uniformitarianism - The concept that geological processes occur by the action of natural laws that are always the same, and by processes that can be observed today.
- Coal and oil take millions of years to develop.
- Over 100 vestigial organs in the human body (i.e., the appendix and tonsils) were useless organs.
- The coelacanth was a missing link between fish and amphibians.
- Peppered moths were examples of evolution (species changing into new species).
- Recapitulation (the idea that the human embryo undergoes stages of animal evolution)
- The Miller experiment proved how life could start.
- The Steady State theory for the universe.

Each of the above has been scientifically demonstrated to be wrong. In each case the model of evolution has had to abandon these ideas, or continues to hold on to them in some cases.

Does the Bible meet the test for changeability?... Yes. The Word of God will last forever.

ISA 40:8 The grass withers, the flower fades, But the word of our God stands forever.

Isaiah 40:8 (NASB)

The Word of God has also stood the test of time. Manuscript evidence, archaeology, and science have repeatedly verified the accuracy and trustworthiness of the Bible. Not a single message has changed in the thousands of years since the first writings. We will look at these

latter in the course.

Confidence Level for Criteria 3: Predictive Capability

- Evolution Low
 - Random chance occurrences have no predictive capability and evolution is constantly changing. If it is constantly changing, how can we know when it is correct?
- Creation High
 - It agrees with and predicts the known laws of science and has never had to change.

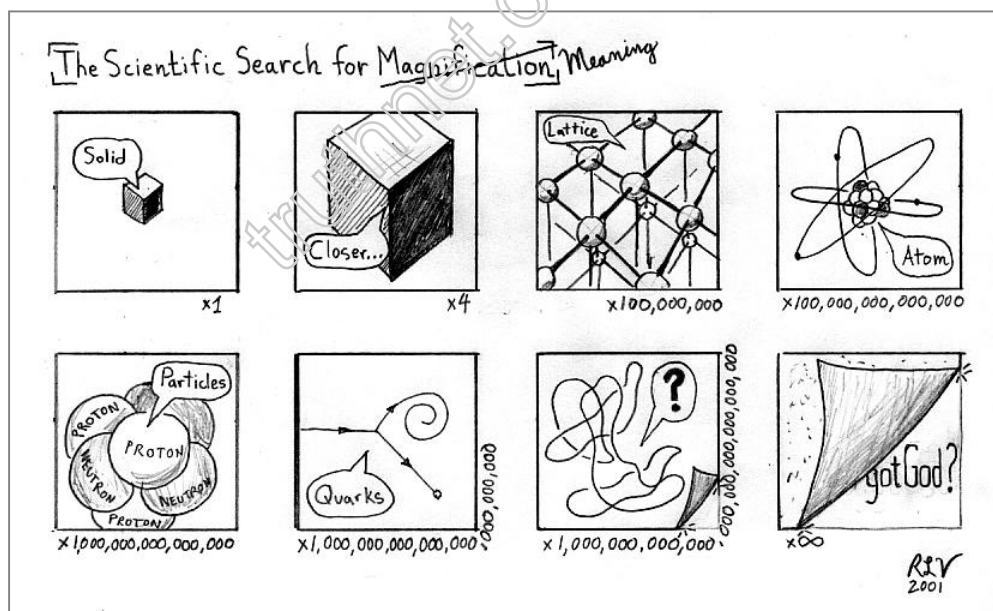
CONCLUSION

Is Evolution Science?

Now let's go back to the statement, "*evolution is science and creation is religion.*" ...Not true.

- Evolution conflicts with many laws of science. In each case evolution cannot be explained using empirical science and therefore must be accepted by faith.
- However, the Bible agrees with the laws of science. This makes the Bible the more scientific model.
 - Evolution cannot explain the origin of matter.
 - Evolution cannot explain the origin of vast amounts of energy and complexity in the universe.
 - Evolution cannot explain the origin of life.
 - Evolution has no cause for the origin of the universe. What caused everything?
 - Evolution conflicts with known laws of science.

So what is evolution? ...It is a strongly held religious faith.



Science and Why It Matters What We Believe

If the Bible is not true history, then as Christians, we have no foundation. There would be no purpose for life. There would be no answers to the important worldview questions we've asked before.

PS 11:3 If the foundations are destroyed, What can the righteous do?"

Psalm 11:3 (NASB)

If what is being taught to support evolution is not scientifically true or is misleading, then people will not understand the true nature of God and will become susceptible to a corrupt and false worldview.

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