

Biology 1.1 Science and Truth

A thirst for understanding, a quest for knowledge, the need for truth.

“Come, let us reason together saith the Lord” Isaiah 1:18

- A. Science is the systematic study of the structure, properties, and behavior of the physical world through observation, interpretation, and experimentation.
 - 1. The word *Science* is derived from the Latin word *scientia*, meaning "knowledge."
 - 2. *Epistemology* is the study of knowledge.
 - 3. *Alethiology* is the study of truth.
- B. Truth is what is correct in creation or how things really are whether it is known, unknown, or misunderstood.
 - 1. Truth is absolute. As the Creator of all things, God ultimately is Truth. This is why Jesus said in John 14:6, “Jesus saith unto him, I am the way, the truth, and the life: no man cometh unto the Father, but by me.”
 - 2. To know God is to know truth. To know truth is to know God.
 - 3. Truth is knowable because God is knowable.
 - 4. God is knowable, unchanging, omnipresent, and rational therefore truth is knowable, unchanging, universally present, and rational.
 - 5. Knowable, unchanging, universally present, and rational truth allows for successful empirical and spiritual discoveries and explanation whether objective or subjective.
 - 6. Change in creation is guided by unchanging qualities of God manifested in laws of creation.
 - 7. God made not only the material of creation but the laws that govern the behavior of materials as well. It is logical then to expect that discoveries about both materials and laws in creation will explain and predict the behavior of creation.
 - 8. The truth of things continue to be true whether you believe or not.
 - 9. It is up to you to find truth and believe it.
 - 10. Can truth be known? How do you recognize it? To deny the knowability of truth is to be a skeptic. But then to live with any certainty and claim that you are right is hypocrisy. And a society of skeptical hypocrites produces cynicism—no one trusts the claims of others.
 - 11. Denying God makes one a skeptical, hypocritical cynic.
 - 12. Accepting that truth is knowable is to be optimistic, which results in sincere claims and a society of honest truth seekers. Honesty and integrity in society has its roots in accepting that truth is knowable.
- C. God created us with senses to observe His physical creation and a rational mind to understand what we observe; and thereby equipped us with the ability to know the truth about Him.
 - 1. Discovery of truth can be achieved by revelation and scientific scrutiny of creation.
 - 2. Discovery of truths in creation will lead to discovery of God. As its Creator, He is the truth of creation.
 - 3. Philosophy is the love of wisdom and involves a disciplined approach to validating knowledge and truth.
 - 4. Science is a branch of philosophy sometimes referred to as natural philosophy in contrast to metaphysical philosophy.
 - 5. Metaphysical relies on logic without empiricism (physical experimentation) to derive conclusions.
 - 6. Biology is the study of life. More specifically, it is the quest for knowledge and truth about life.
 - 7. *Empiricism* refers to the use of observation and experimentation of the physical world to acquire knowledge about creation.
- D. Ultimately, God is the source of all truth. In Him, there is perfect, absolute knowledge of all things in creation.
 - 1. The Bible is revelation of truths from God.
 - 2. Biblical faith is a ‘seeing’ faith. Hebrews 11:1 says that, “...faith is the substance of things hoped for, the evidence of things not seen.” And verse three says, “Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear.”
 - 3. Revealed truth comes by the Word of God in the Bible, the Spirit of God, and the creation of God and is confirmed by the faith of God.
 - 4. Faith is God’s way of personally confirming truth to individuals.
 - 5. Revealed truth may be a source of confirmed personal or subjective truth only, or as truth that can be socially or objectively verified.
 - 6. Personal or subjective truth is known by individuals, and social or objective truth is verified by community scrutiny.

7. Knowing personal truth does not depend on third party proof. In other words, it is not required that you be able to prove personal knowledge to others in order for it to be true. For example, you may not be able to prove what you ate for breakfast last week, but you know what is true none the less.
 8. Science is important to establishing objective, validated truths in society. Faith is personal, subjective truth revealed to you by God.
 9. Subjective truths can be verified intersubjectively when personal experiences are shown to be individually shared in a community. A pattern of similar personal experiences can be objectively and scientifically verified. For example, after hearing the Gospel message, many people share the personal experience of conviction. This is an experience of personally receiving faith from God (Rom 12:3; Heb 11:1, 3) to confirm personal need for salvation.
 10. Many truths mentioned in the Bible can be verified scientifically. For example, the Bible says that man was made from the dust of the earth. Science has shown empirically in the laboratory that the physical body of man is made of the elements found in the dust of the earth.
 11. Some truths mentioned in the Bible are not scientifically verifiable. For example, science has not shown **how** man was made from the dust of the earth. To do this, one would have to produce a man in the laboratory from dust. No one has ever done this by any means.
 12. Some truths about creation are not revealed in the Bible. For example, the Bible does not explain or even mention the migratory behavior of monarch butterflies.
 13. Defined truths are man-made rules derived to communicate ideas such as math and language.
 14. Discovering and understanding truth about God and creation are difficult because of human limitations.
 15. Human limitations for discovering truth are determined by our abilities to 1) correctly observe creation, 2) correctly interpret our observations, and 3) correctly test our interpretation by experimentation.
 16. Understanding truth by revelation or by empirical discovery is subject to human limitations of correct knowledge, competency of interpretation, and skills of experimentation.
- E. Man is finite in knowledge and flawed in logic, therefore, his understanding of the world can never be absolute and unquestionable truth.
1. Lack of absolute proof scientific truth does not mean it is necessarily wrong, doubtful, or impractical. It means only that it is not guaranteed to be true.
 2. It is possible to be right for the wrong reasons. For example, “water will run downhill because water molecules are magnets attracted to the larger collection of water molecules in the ocean or a lake.” It is true that water flows downhill, but it is not true that water flows downhill because of magnetism to the ocean.
 3. It is possible to wrong for the right reasons. For example, peanuts are a good food for everyone because it has protein, fat, and minerals in it. It is true that peanuts are a good source of protein, fat, and minerals; but some people are allergic to peanuts and could even die if exposed to peanuts.
 4. Personal bias, spiritual darkness, vain imagination, and pride can cause truth to be misunderstood or rejected.
 5. Most people rejected Christ even when He was physically present on earth.
 6. Pilate rejected Jesus after asking Him what is truth.
 7. Truth is knowable for the person who is honest and humble.
 8. Recognizing truth requires willingness to accept God on His terms not yours. That is humility.
 9. Science is a good means of empirically testing the truth of a claim. Therefore, every testable claim must have the possibility of being falsified.
 10. Fallacies are claims that are shown to be wrong. For example, the doctrine of humors, the doctrine of signatures, spontaneous generation, and plants growing from materials in the dirt have been shown to be false.
- F. Developing the skills of learning and discerning truth is essential because you live in a world of deceit. All men are liars even scientists, and fraud is rampant in science. This is why we need Christians with integrity to become scientists. And this is why all scientific claims must be subjected to experimentation by others.
1. Being wrong does not make you a liar. It is possible to be ignorant because you are unskilled in observation, interpretation, and/or experimentation.
 2. Science requires honesty and humility to discover unknown truths and to correct errors.