Why I Believe in a Young Earth

by Dr. Jay L. Wile, Ph.D.

Qualifications

⇒ Ph.D. in Nuclear Chemistry from the University of Rochester
⇒ University Professor From 1990 - 1995
⇒ NSF-Sponsored Scientist with More Than $200,000 In Research Grants
⇒ More than 30 articles in the peer-reviewed journals of Nuclear Chemistry
⇒ Currently writes science curriculum for homeschoolers.

I believe in a young earth because it is the most obvious interpretation of Scripture

At the same time, however, we don't always take the most obvious interpretation.

- Habakkuk 3:11 depicts the sun as moving
- Psalms 93:1, 96:10, and 1 Chronicles 16:30 depict the earth as stationary

Because of verses like these, Protestants and Catholics were united in the geocentric interpretation of the universe.

I do not believe in a young earth because I think Scripture requires it.

First: There are reasonable arguments against taking the early chapters of Genesis as historical narrative

Dr. Gordon Wenham, once called "one of the finest evangelical commentators today" (Tremper Longman, *Old Testament Commentary Survey*) wrote an extensive commentary in *Genesis 1-15.* He says there are many poetic elements in the Genesis creation account (repetitive elements, parallelism, triads of days, etc.) and as a result, it should not be taken over-literally. In addition he says, "at best, all language about God is analogical."

Historical narrative is best written by eyewitnesses, and this is what the Bible generally uses. However, the eyewitnesses for the events in Genesis don't start writing until Moses.

The very nature of the creation story is miraculous. It is also something no human has ever experienced. Thus, it is not clear history even applies to it.

Second: There are reasonable arguments against taking the days in Genesis 1as 24-hour days.

"Now...I'm not a Hebrew exegete. But I will tell you that two of the best-known exegetes of the Old Testament in the American evangelical community are Gleason Archer at Trinity Evangelical Divinity School and Walter Kaiser at Gordon Conwell. Walter Kaiser and Gleason Archer are respected in the entire United States as being faithful expositors of the Old Testament. Both of them know eight to ten Old Testament languages, and they both have spent their entire lives in Hebrew exegesis. Both of them believe the days of Genesis are...vast, unspecified periods of time, and are in no way required to be literal twenty-four hour days."
(Dr. J. P. Moreland *lecture at Northshore Church in Everett, Washington on February 2, 2002.*)

It's not clear how you track time before the creation event is complete.

- Our current understanding of time indicates it is intimately connected with space. If space doesn't exist, time cannot.
- Origen (A.D. ca. 185-254) says, "For who that has understanding will suppose that the first and second and third day existed without a sun and moon and stars and that the first day was, as it were, also without a sky? . . . I do not suppose that anyone doubts that these things figuratively indicate certain mysteries, the history having taken place in appearance and not literally" (*The Fundamental Doctrines* 4:1:16 [A.D. 225]).
- Justin Martyr (A.D. ca. 100 - 165) argued that time was created along with the heavens (*Hortatory Address to the Greeks* 33)

Third: Even in the early church, there were other ways Genesis 1 was interpreted.

"For the creations on the different days followed in a most important succession; so that all things brought into existence might have honour from priority, created together in thought, but not being of equal worth. Nor was the creation of each signified by the voice, inasmuch as the creative work is said to have made them at once. For something must needs have been named first. Wherefore those things were announced first, from which came those that were second, all things being originated together from one essence by one power. For the will of God was one, in one identity. And how could creation take place in time, seeing time was born along with things which exist." – Clement of Alexandria (A.D. ca 150-216) (*The Stromata*, Book 6, Chapter 16, 205 AD)

This view, called "instantaneous creation" comes from Judaism before the time of Christ, and it was popular in the early church.

"And he says that the world was made in six days, not because the Creator stood in need of a length of time (for it is natural that God should do everything at once, not merely by uttering a command, but by even thinking of it); but because the things created required arrangement; and number is akin to arrangement." - Philo Judaeus (20 BC – 50 AD), who was writing about *accepted* theologies at the time. (*The Creation of the World*, III, 30 AD)

This Is Where Some Young-Earth Creationists Don't Depict Church History Accurately

"What did the early church believe about creation? In its first 16 centuries the church held to a young earth. Earth was several thousand years old, was created quickly in six 24-hour days, and was later submerged under a worldwide flood." - James R. Mook, "The Early Church on Creation," http://www.answersingenesis.org/articles/am/v2/n4/early-church-on-creation

This is just not true! Many early church theologians believed the days weren't even days, and others believed the Genesis account was figurative. The early church did believe in a young earth, but not necessarily for the same reason modern young-earth creationists believe in it.

There are Differing Orthodox Views of Creation

This allows Christians to be **open-minded** when it comes to the history of the earth.

Anyone who does not believe in a Creator God is **forced** to believe in an ancient earth, because there is no materialistic way to explain our existence without the "magic wand" of billions of years.

Christians can honestly evaluate the evidence to SEE what science says about the age of the earth.

How Do You Measure The Age of Something?

- You need a process that happens at a **constant rate.**
- You need to know that **rate.**
- You need to know the **initial conditions**.
- You need an **isolated** system.

There are at least **68** such processes in Creation which have been identified. They give ages for the earth that range from 100 years old – 4.6 billion years old

See: *What is Creation Science?* by Morris and Parker

The Amount of Sodium in the Ocean

Na^+ enters via:

- Rivers
- Surface runoff
- Groundwater discharge
- Ocean sediment release

Na^+ leaves via:

- Ocean Spray
- Clay absorption
- Sediment trapping
- Zeolite absorption

Sodium is entering the oceans faster than it is leaving.

Initial sodium level at zero: 62 million years old

See: http://tccsa.tc/articles/ocean_sodium.html

The Earth's Helium Inventory

Helium is a light gas. It is produced on the earth mainly by the radioactive decay of certain atoms in the earth's crust. Because it is both light and unreactive, it tends to escape the rocks and enter earth's atmosphere. Once it reaches the atmosphere, it can escape into space *if* it has enough energy to escape earth's gravity.

- The rate of production of helium is based on the rate of radioactive decay, the amount of radioactive isotopes, and the rate at which helium escapes from rock. These are all easily measurable and well-understood.
- The rate of escape is based on the amount of helium in the atmosphere and the energy distribution of the helium atoms in the atmosphere. These are all easily measurable and well-understood
- The result is that helium is entering the atmosphere faster than it is leaving. If the atmosphere had **no helium** to begin with, the earth could be no more than **2 million years old**.
- This figure is an upper limit. We *know* that radioactive decay was faster in the past, because there were more radioactive isotopes. Also, the earth used to be more geologically active, which releases even more helium into the atmosphere.

See: http://www.answersingenesis.org/creation/v20/i3/old_earth.asp

http://www.answersingenesis.org/tj/v8/i2/helium.asp

Dendrochronology

Oldest Living Tree: "Methuselah," a bristlecone pine **4,800 years old**

There is no theoretical limit on the age of bristlecone pines. Nevertheless, the oldest one has under 5,000 rings. This is actually an upper limit, as trees are known to form double rings occasionally.

See: http://www.answersingenesis.org/home/area/faq/docs/tree_ring.asp

Earth's Magnetic Field

Facts:

- ⇒ Since 1890, it has been decaying.
- ⇒ During times in the past, it has reversed.
- ⇒ Some planets have one, some don't.

Why does the earth have a magnetic field?

Physicists think that here are large electrical currents flowing through the core of the earth. There is a lot of evidence to support that these currents are the source of earth's magnetic field.

The Rapid-Decay Theory

God created the earth out of pure water (2Peter 3:5 - "...and the earth was formed out of water and by water.") with all of the molecule's spins aligned. This created an enormous magnetic field. Those atoms would quickly de-align with time, but their initial magnetic field would set up a current in the earth's core. The current would then decay rapidly (on the order of thousands of years) due to friction.

The current can be reversed under the influence of great tectonic activity.

Assuming other planets were formed this way, you can use the model to calculate other planets' fields.

The Dynamo Theory

During the formation of the earth, the earth's rotation caused separations of certain chemicals in the molten outer core. These chemicals were charged, and their mutual attraction began to force them back together. Because of certain conditions of temperature, complex currents were set up in the liquid of the outer core, producing random electrical currents, which result in a magnetic field.

This is similar to a **dynamo**, which can be shown to convert thermal energy or kinetic energy into magnetic or electrical energy.

Since the dynamo is a result of random currents, the magnetic field it generates will be somewhat erratic, and it will decay, increase, and sometimes reverse, depending on the specific conditions at the time.

The dynamo should last as long as the earth keeps spinning. Assuming that other planets have similar dynamos allows you to predict the fields of other planets.

Problems With The Dynamo Theory

- Cannot correctly predict whether or not a planet will have a magnetic field:
  Mars has no planetary field, dynamo theory predicts one.
  Mercury has one, dynamo theory predicts none.
- Using earth as a calibration, it is wrong on the strength of the other planets' fields.
- Rock samples from the moon and Mars both indicate that they each had magnetic fields at one time. Now neither do. The dynamo theory predicts that a planet or moon that has a magnetic field will always have one.

Success Of The Rapid-Decay Theory

- Correctly predicts the presence or absence of a magnetic field for each planet.
- Using earth as a calibration, it is correct on the strength of the other planets' fields
  In 1984, the theory was used to predict the magnetic fields of Neptune and Uranus. Neither had been measured. In the 1990's, Voyager measured those fields. The dynamo theory was 10,000 times off, this theory was right on the money.
- Correctly predicts the fact that Mars and the moon both had a magnetic field at one time. The Mars prediction was made BEFORE this was determined.
- Correctly predicted the fact that Mercury's magnetic field seems to be **lower** than when Mariner 10 measured it in 1975.

See: http://www.creationresearch.org/crsq/articles/21/21_3/21_3.html

http://creation.com/mercurys-magnetic-field-is-young

Helium Trapped in Zircons

- One mode of radioactive decay is **alpha decay**. When this happens, a nucleus ejects an alpha particle, which is a helium nucleus.
- This helium nucleus begins to speed away from the emitting nucleus, but it can get trapped in surrounding material.
- While examining zircons from a borehole in Fenton Hills, New Mexico, scientists noticed large amounts of helium in the zircons. This was surprising, as helium should diffuse out of zircon fairly quickly.
- If the radioactive decay that produced the helium was as slow as expected from the half lives of the isotopes present, there should not be much buildup

The researchers looked through the literature and were surprised to find that although it was generally assumed that helium diffuses quickly through zircon, the actual rate had **never been measured**.

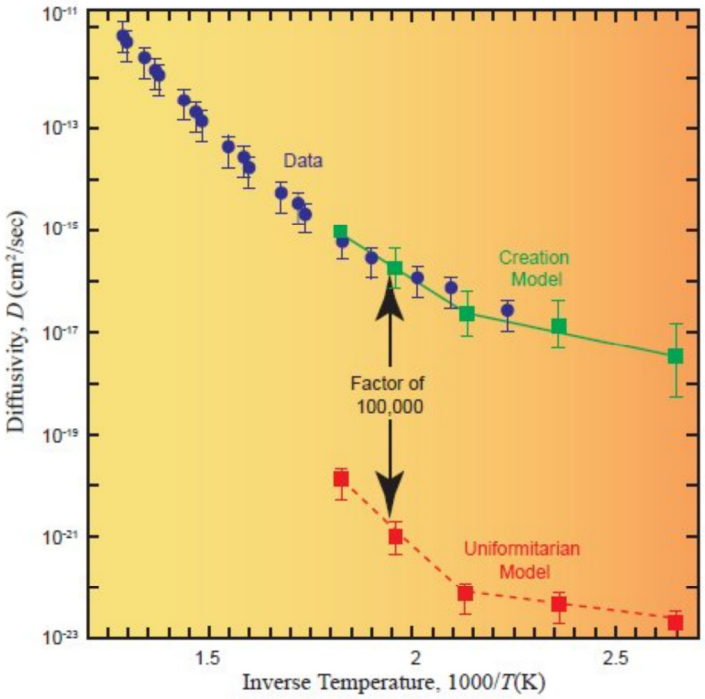
The researchers set up two scenarios:

- ✓ Assuming the rocks were as old as standard geology claims (greater than 1.5 billion years old) and that the radioactive decay rates are constant, they predicted how quickly helium must diffuse out of zircon to get the buildup that was observed.

- ✓ Assuming the rocks were only 6,000 years old and that there was an early "burst" of radioactive decay that produced more than "500 million years" worth of alpha decay in a few days, they predicted how quickly helium must diffuse out of zircon to get the buildup that was observed.

Not surprisingly, the predictions were off by a factor of 100,000!

Two years later, the diffusion rates were measured



The data lined up **perfectly** with the prediction that the rocks were thousands of years old and that there had been a "burst" of radioactive decay in the past.

See: http://www.icr.org/research/icc03/pdf/Helium_ICC_7-22-03.pdf

Conclusions

- Science should never dictate your interpretation of Scripture.
- Where differing orthodox interpretations exist, science can be used to help you choose from among them.
- Based on the science that I know, I am most comfortable with a young-earth interpretation.
- I am easily willing to change my mind, since other orthodox interpretations of Scripture exist.