

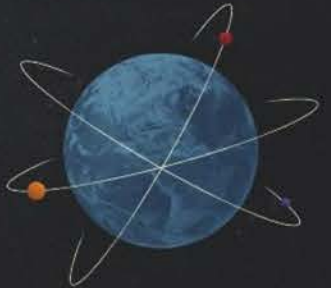


UNDERSTANDING

Creation

welcome

**WHAT'S HAPPENING
TONIGHT...**



LITERAL VIEW

Flat Earthers

Geocentrism

Young Earth Creationists

GAP VIEW

Old Earth Creationists

Historical Creationism

DAY/AGE VIEW

Progressive Creationism

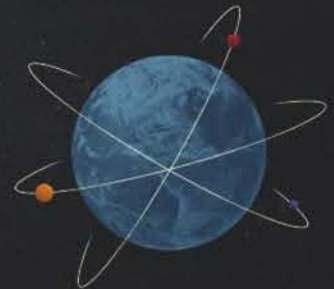
Intelligent Design

LITERARY FRAMEWORK

Cosmic Temple Inauguration

Evolutionary Creation

THE CONTINUUM OF INTERPRETATION

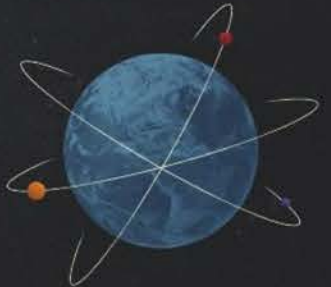


~~LITERAL VIEW~~

~~GAP VIEW~~

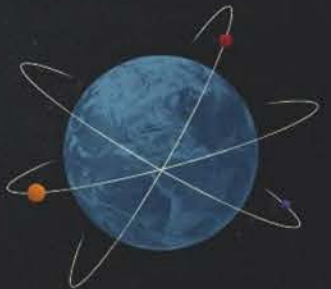
DAY/AGE VIEW

LITERARY FRAMEWORK VIEW



**“IN ESSENTIALS UNITY,
IN NON-ESSENTIALS LIBERTY,
AND IN ALL THINGS CHARITY.”**

- Rupertus Meldenius

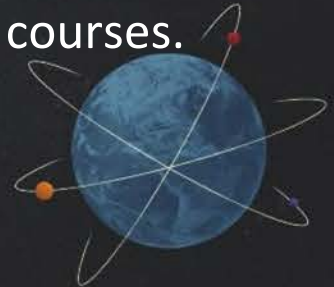




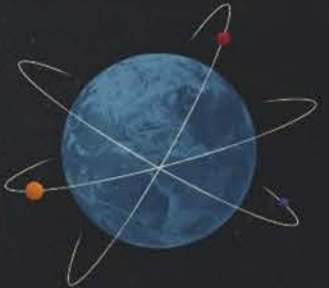
BRANDON REDDELL, PhD

Brandon and his wife, Laura, have a son, Griffin. He is a member of the Egret Bay campus and serves as a Navigator. He is a scientist and engineer at the NASA Johnson Space Center. Additionally, he is an adjunct professor at the University of Houston at Clear Lake where he has been teaching undergraduate physics and astronomy.

Brandon holds a PhD in Physics from the University of Houston and a MS in Applied Physics from Johns Hopkins University. Brandon is also a volunteer apologist for *Reason to Believe* and has been involved in teaching the RTB Astronomy and Design courses.



Day/Age Overview



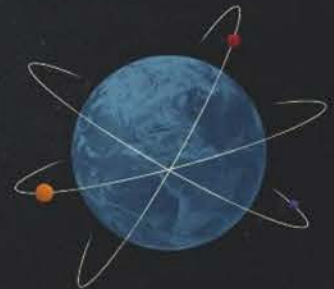
What is Day/Age View (Old Earth Creationism)?

- View that the Bible and Nature (God's revelation) teach/show old age and agree on events.
 - The Big Bang Creation is Genesis 1:1 - Creation of the Universe from Nothing.
 - Development of Earth looks a lot like Genesis.
 - Human Origins: DNA analysis increasingly shows evidence of an original pair of humans.
 - Macroevolution has real problems
 - Origin of Life is still a mystery



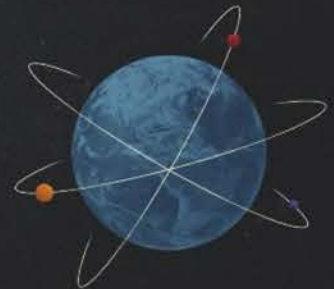
What is Day/Age (Old Earth Creationism)?

- Science says that Genesis 1-2 happened.
 - It just happened more than a few thousand years ago.
 - The Hebrew words in Genesis 1 support this view.
 - Gives us strong evidence to argue that there is a God and it is the God of the Bible.



Hebrew Word 'yom' - Several Meanings for Day

- 'yom' is translated to english as 'day'.
- Has at least 4 meanings: daylight hours, a literal 24 hour day, a reference to the past (like, back in the day), and a long unspecified period of time.
- 'yom' is the only Biblical Hebrew word for long period of time.
- 3 uses of 'yom' are used in Genesis 1-2.



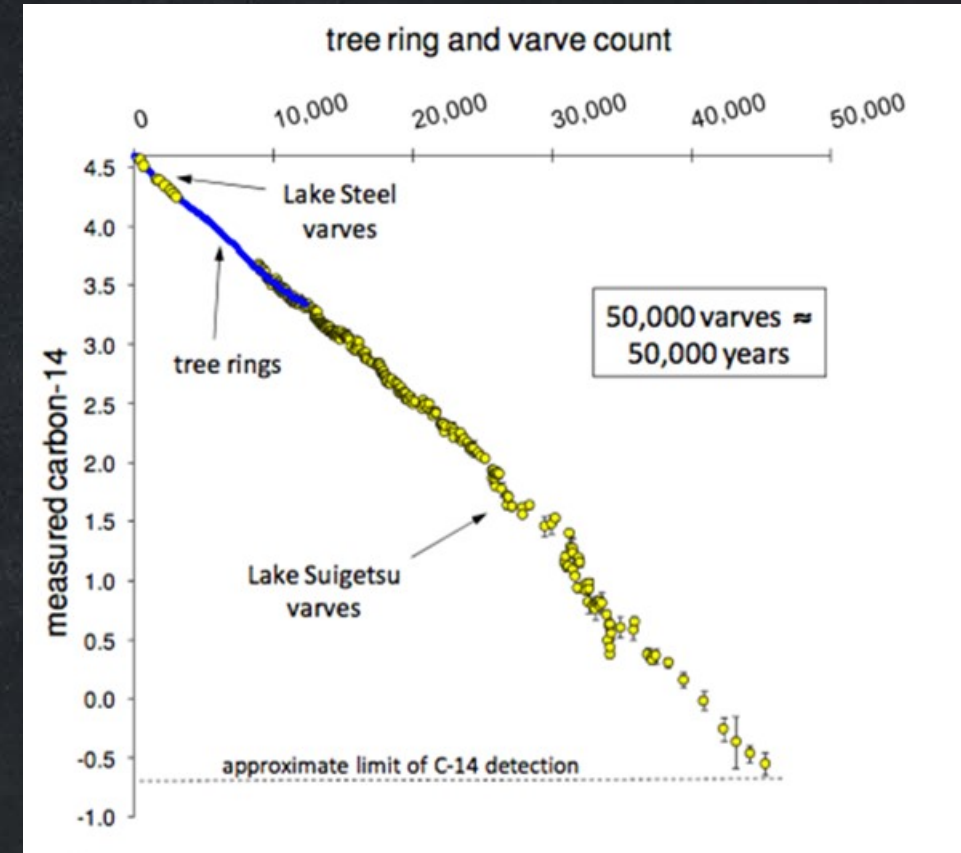
Genesis Teaches Long Ages

- Creation Day 3 is long: God allows the earth to produce vegetation.
- Creation Day 6 seems to take longer than a day.
 - creation of mammals and mankind, a planted garden, Adam named all the animals, and when Eve was made, stated "at last"
- Creation Day 7 hasn't ended - God is rested (Heb 4:4-11) - has been at least 6,000 years



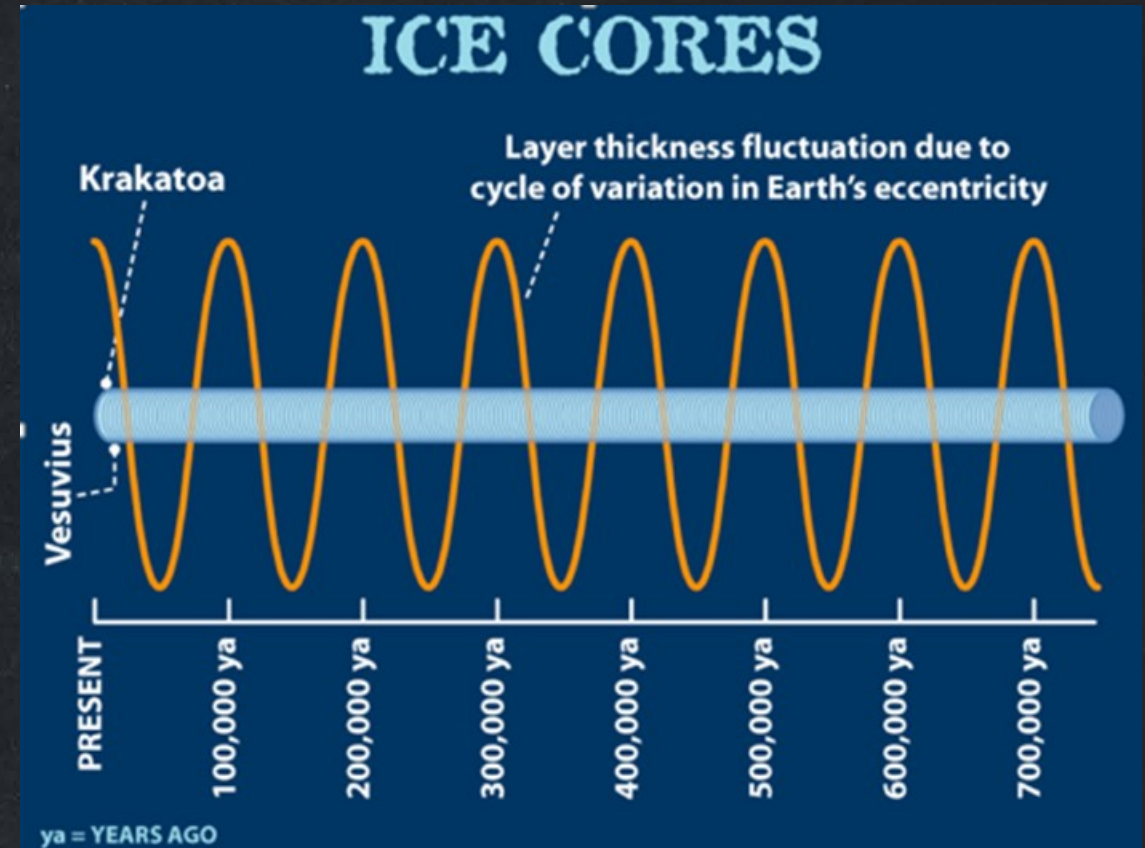
Earth Shows Evidence of Old Age

- tree rings and varves ages to ~ 50,000 years ago
- correlated with carbon-14



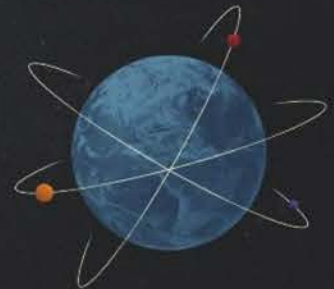
Earth Shows Evidence of Old Age

- Ice core data (~800,000 years) show ratio of oxygen-18 to oxygen-16 whose variations are tied to CO₂, acidity, and temperature changes.
- Correlated to:
 - historical events
 - Milankovitch cycles



Earth Shows Evidence of Old Age

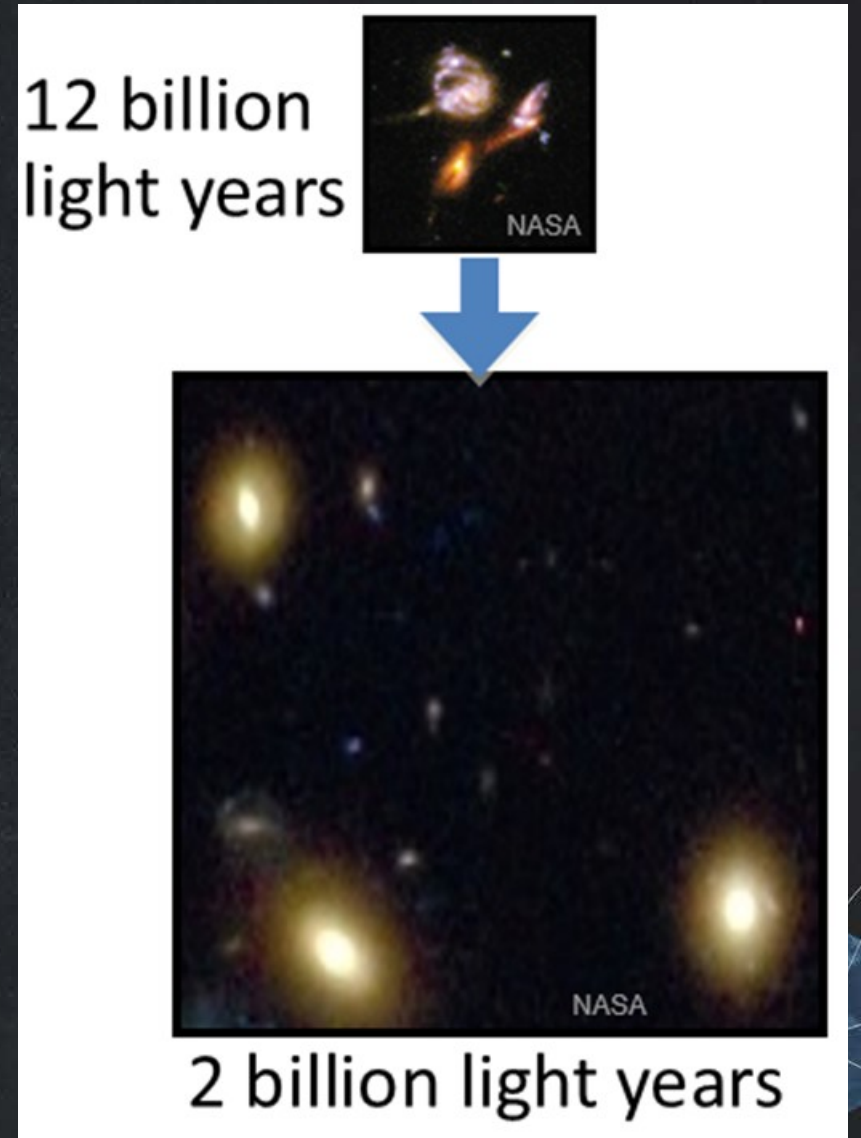
- Other independent dates of age:
 - coral layers to 400 million years ago
 - correlated with atomic clocks
- Dating of rocks > 4 billion years of age



Universe Shows Evidence of Old Age

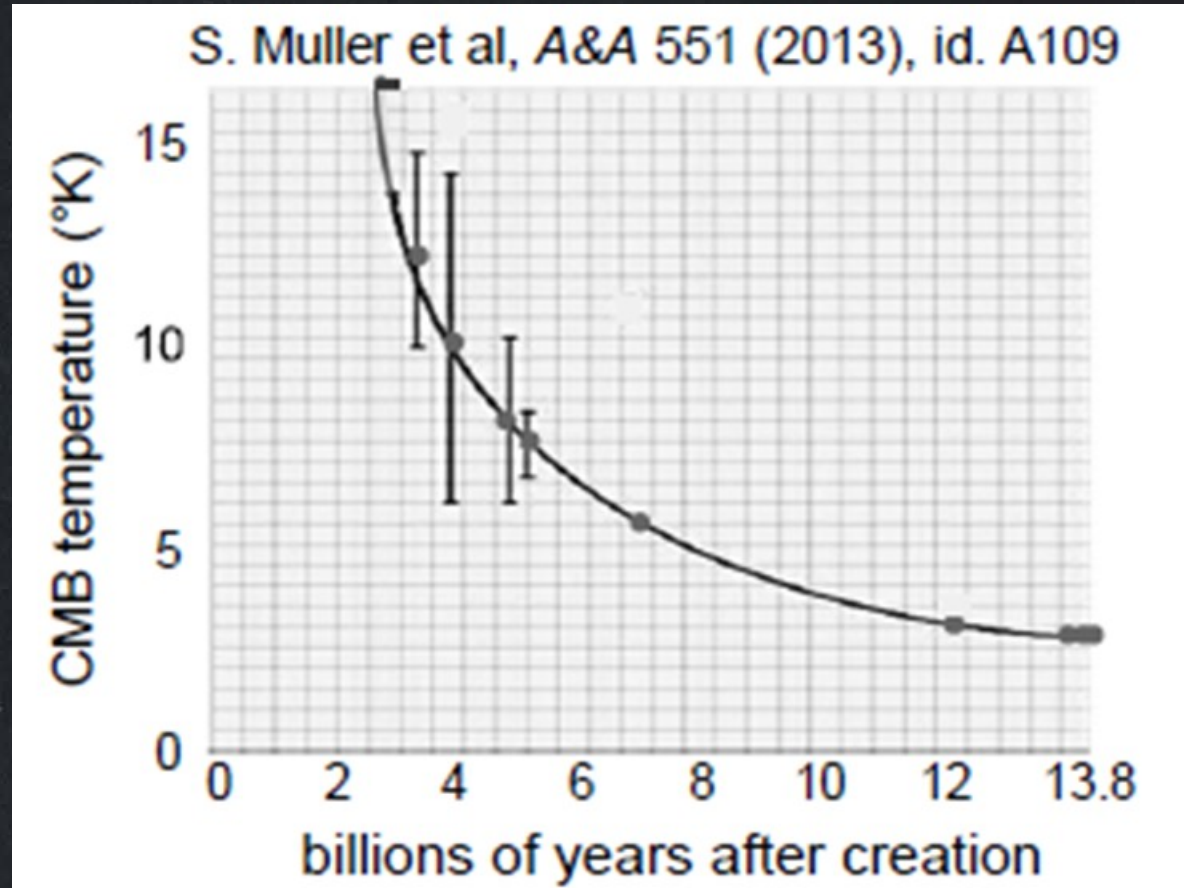
Astronomers see galaxies more spread out now than in the past,

- Measured expansion rate
 - size/rate = age
 - ~14 billion years old



Universe Shows Evidence of Old Age

- Temperature measurements - implies cooling for 14 billion years



Universe Shows Evidence of Old Age

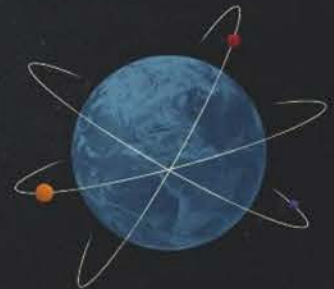
- White Dwarfs: the very existence of these dead stars implies a very old universe (millions to billions depending on their mass)
- Cooling sequences for white dwarfs establish that many of them have been cooling for billions of years.
 - Estimates are 100 million billion years to cool down



Image from NASA Hubble Space Telescope: Ancient White Dwarfs 12-13 billion years old

Universe Shows Evidence of Old Age

- Other independent dates for old age:
 - Constant of Speed of Light ~ 13.2 billion years
 - $E=mc^2$ show burning rates for billions of years
 - Radiometric Decay - universe is billions of years old, not thousands or quadrillions



Bible Describes:

Key Features of Big Bang Creation

- easily understood by all people
- The universe had a beginning, it was created from nothing. (Gen 1:1, 2:3, 2:4, Psalm 148:5, Isaiah 40:26, 42:5, 45:18, John 1:3, Col 1:15-17, Heb 1:10, 3:4, 11:3)
 - A universe from nothing requires a Creator - God.



Bible Describes:

Key Features of Big Bang Creation

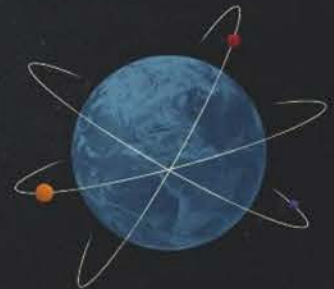
- The Bible says that the universe is expanding, stated 11 times by 4 different authors.
 - (Isa 40:22, Isa 42:5, Isa 44:24, Isa 45:12, Isa 48:13, Isa 51:13, Jer 10:12, Jer 51:15, Zech. 12:1)
 - Job 9:8 “who alone stretched out the heavens”
 - Psalm 104:2 “stretching out the heavens like a tent”



Bible Describes:

Key Features of Big Bang Creation

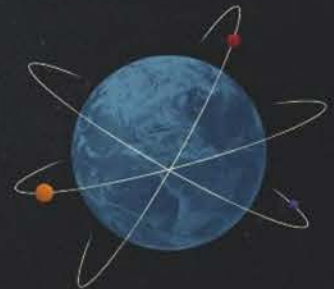
- The universe has constant laws of nature.
 - Jer 33:25, Ecl 1 & 3, Rom 8:21
- Pervasive law of decay (Rom 8:20-22)



Science Confirms:

Features of Big Bang Creation

- General Relativity and Cosmological models predict our universe and its singular beginning.
- Universe is Expanding - multiple confirmations
- Cosmic Microwave Background - confirms:
 - beginning conditions
 - expansion rate
 - temperature evolution



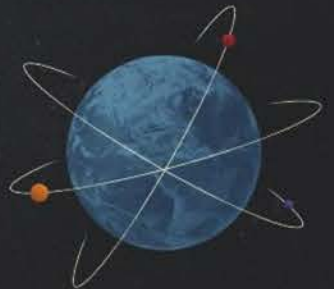
Formation of Earth (Genesis Creation Days)

- What God chose to reflect in Genesis reveals a theme of the development of a habitat for humanity (but does not have all the details).
- Each day describes a major transformative event.
- Reveals what God has chosen to be important for all generations about their origins.
- According to Job, God's creation works are beyond human fathoming, measuring or counting (Job 36:25 - 37:23).



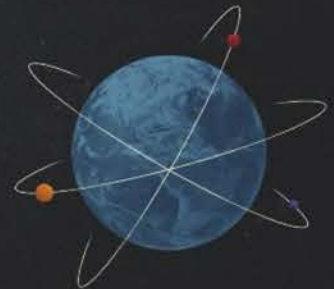
Hebrew Meaning Lost in English Translation

- 'bara' - created for first time & by God
 - universe, soulful creatures, humans
- 'haya' - appear, come to pass & 'asa' - to fashion
 - i.e., atmosphere (v6-7), Sun and moon (v14-16)
- Some details are lost in translation, for example:
 - the expanse and sky on day 2
 - types of plants mentioned on day 3
 - distinction of creatures on days 5 & 6



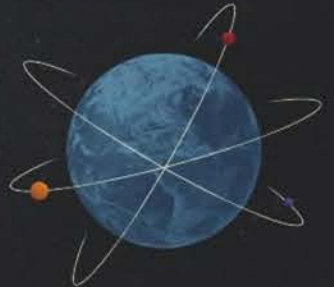
Science Confirms: Genesis Creation Account

- v2: spirit hovering over the surface of the Earth
 - the rest of the Genesis is from this perspective
- The early earth really was covered in water and the atmosphere was so thick and heavy there was darkness over the surface of the earth.
 - Job 38:9 confirms this
 - well established from planetary science
 - primordial Earth atmosphere - 200x thicker



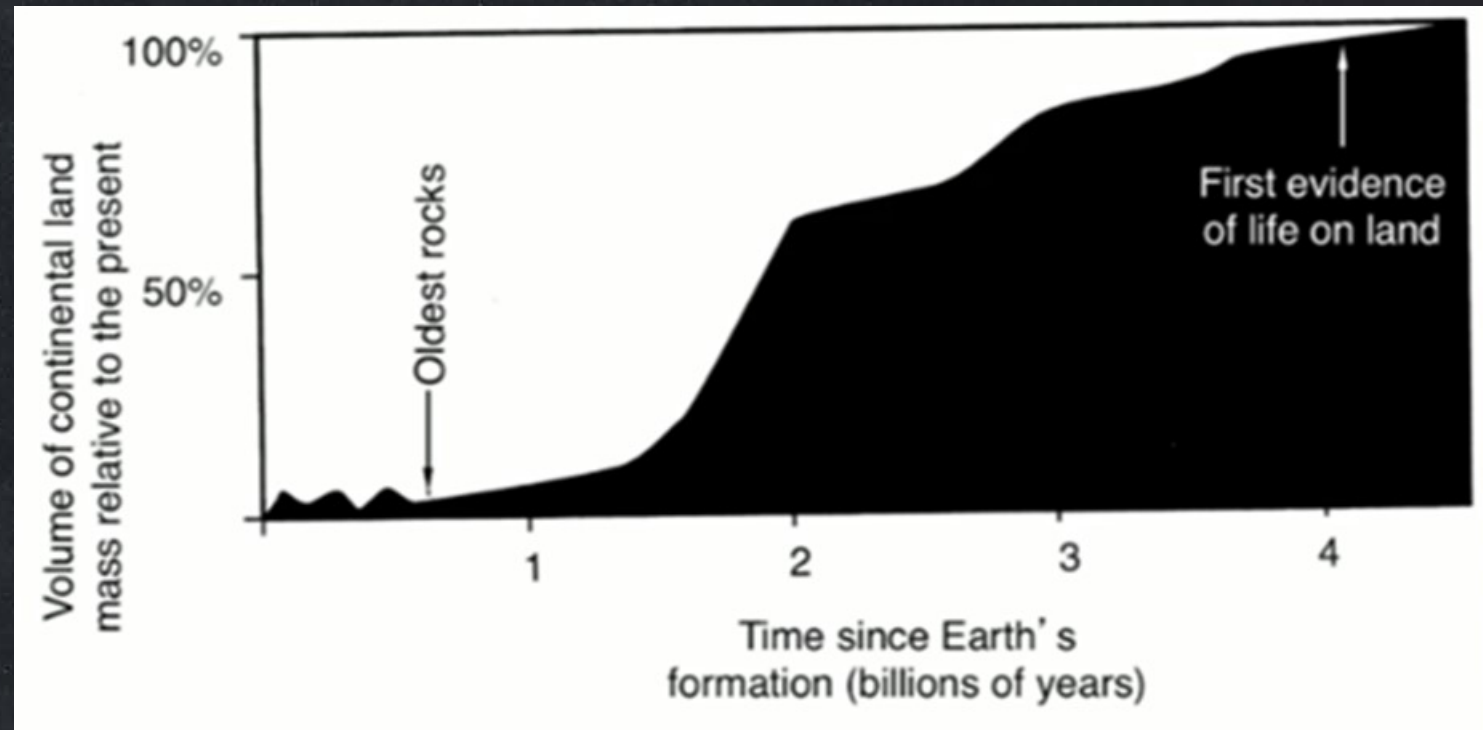
Science Confirms: Genesis Creation Account

- DAY 1- the atmosphere thinned to let light get to the surface
 - moon formation event confirmed by science
 - thinned the very thick atmosphere
- DAY 2- water cycle established
 - support from Psalm 104 & 148, Prov 3 & 8, Job 36 thru 38



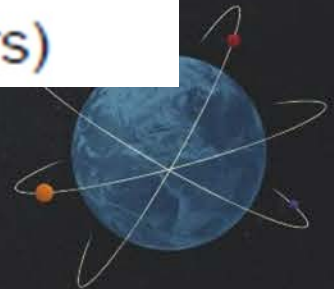
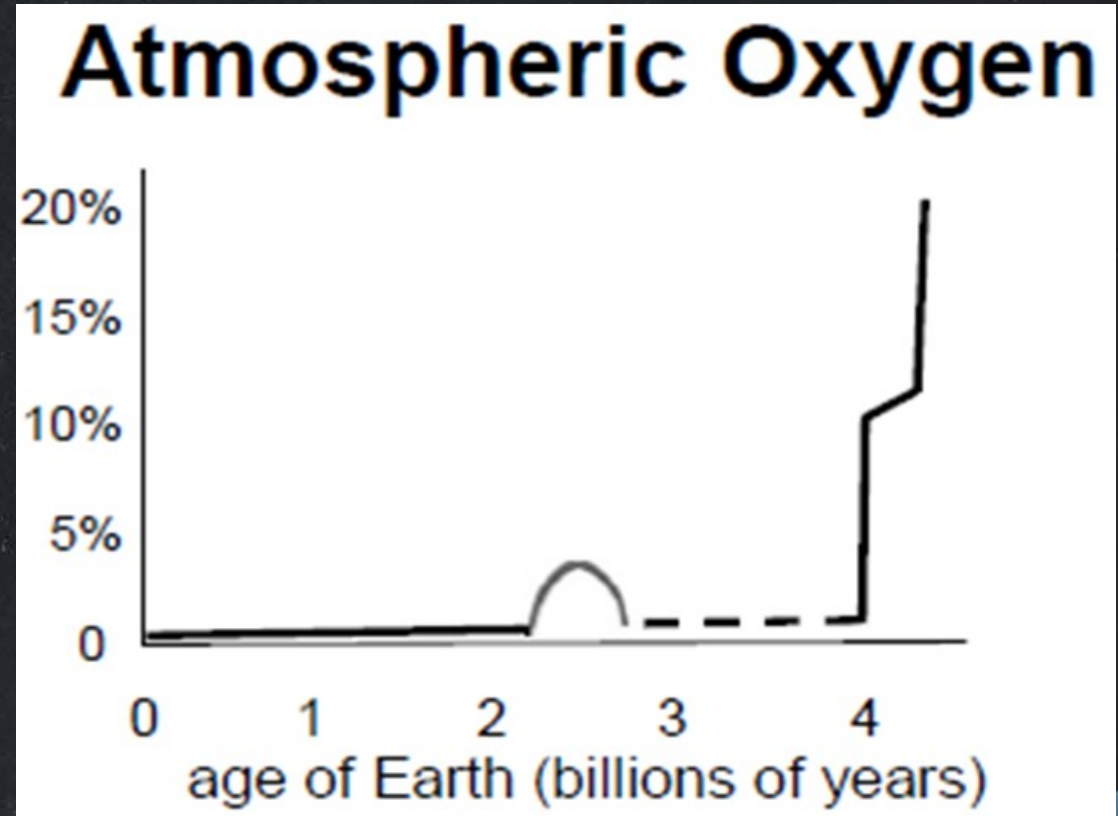
Science Confirms: Genesis Creation Account

- DAY 3 - The land/continents really did rise from the oceans.
 - support from Psalm 33:7, Job 38:8-10, Psalm 104:5-9, Proverbs 8:29
- Plants appeared as far back as 1 billion years ago (~600 million years before animals)



Science Confirms: Genesis Creation Account

- DAY 4 - Photosynthesis helped clear out the Carbon Dioxide so the atmosphere cleared.
 - The Sun, Moon, and Stars were visible from the surface for the first time. Oxygen levels started to rise.



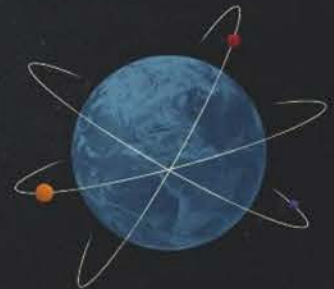
Science Confirms: Genesis Creation Account

- DAY 5 - The Cambrian Explosion of life begins with sea creatures and the birds.
 - ~540 mil yrs ago - fossil record explodes with life
 - big problem for macroevolution
 - dinosaurs lived (starting ~ 245 mya), some birds/mammals survived extinction event
- DAY 6 - Domesticated animals and humans are created.



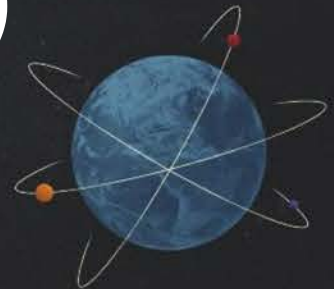
Bible Genealogies are Difficult

- Hebrew 'ab' - can refer to grandfather, great-grandfather, great-great-grandfather, forefather or ancestor.
- Similar meanings with 'ben' for great-grandson.
- Gaps exist in genealogies.
- Estimates for Adam and Eve from genealogical data alone can range from ~10,000 - 100,000 years ago.



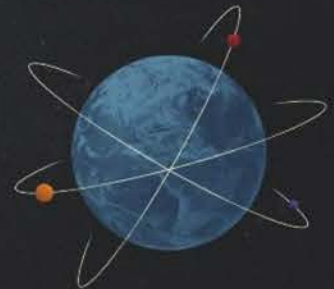
Human Origin Dates

- Humans are uniquely different than all other animals - created in God's image.
- Anthropology has evidence for 'cultural' explosions dating back to ~45,000-80,000 yrs ago.
- Mitochondrial DNA - date of first female (average)
 - ~50,000 - 100,000 years ago
- Y-chromosome DNA - date of first male (average)
 - ~ 100,000 years ago



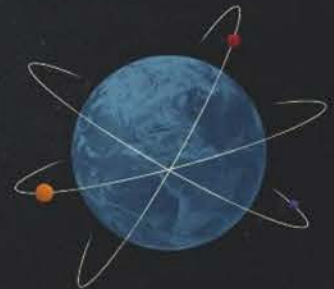
Is Evolution Fact?

- It depends what is being referred to:
 - microbial evolution - yes
 - microevolution - yes
 - speciation - yes
 - macroevolution - no
 - chemical evolution - no



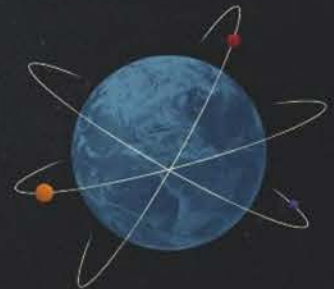
Is Evolution Fact?

- Microbial evolution: bacteria, viruses, single-celled organism that evolve variances of original form without creating new species.
 - i.e. bacteria becoming resistant to antibiotics)



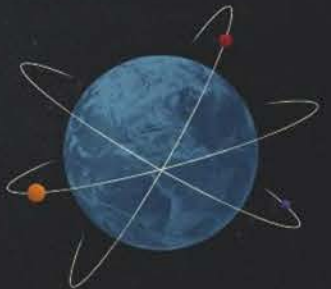
Is Evolution Fact?

- Microevolution: variation of species adapting to environment.
 - i.e. peppered moth - white winged changing over to dark wing during industrial revolution.



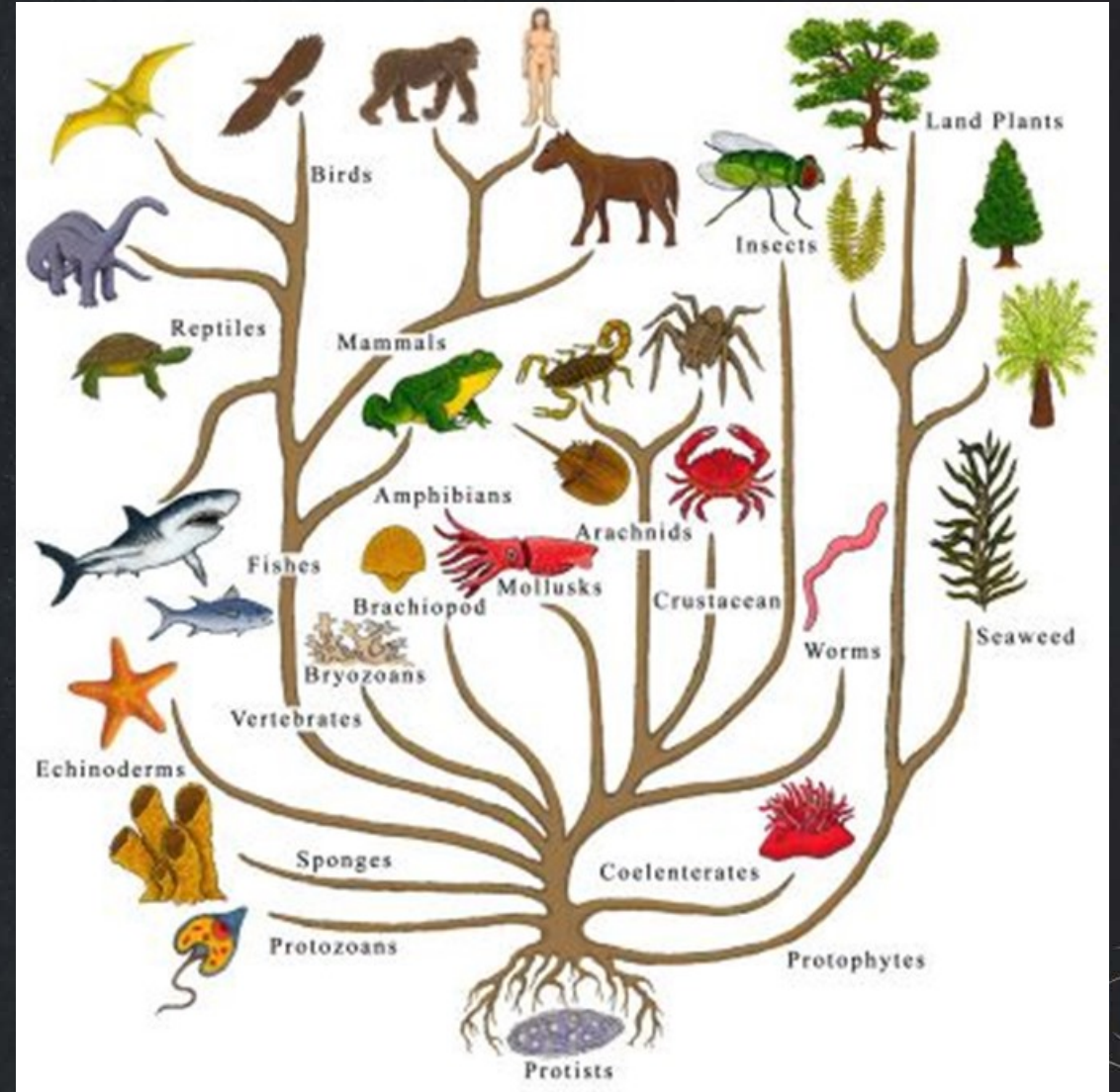
Is Evolution Fact?

- Speciation - the creation of sister species.
 - i.e. Galapagos Finches, no radical changes, still mate with each other



Is Evolution Fact?

- Macroevolution- natural processes can change one major biological group into another major biological group
- Chemical evolution - life from non life, a.k.a. Abiogenesis
 - major hurdle - no data

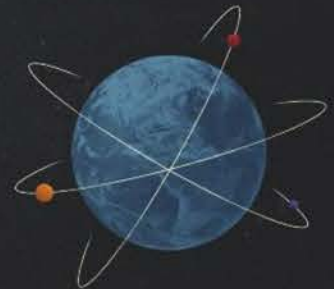


Darwin's Doubt

from "Origin of the Species..." - Charles Darwin

"There is another and allied difficulty, which is much more serious. I allude to the manner in which species belonging to several of the main divisions of the animal kingdom suddenly appear in the lowest known fossiliferous rocks . . . To the question why we do not find rich fossiliferous deposits belonging to these assumed earliest periods prior to the Cambrian system, I can give no satisfactory answer."

- Darwin hoped it would be resolved in the future.
 - 150 years later no resolution!

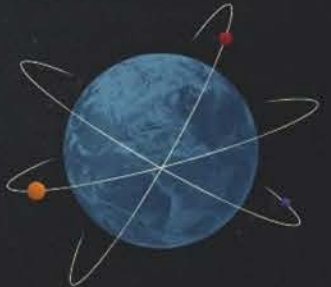


November 6-7, 2015, Royal Society Meeting

“New trends in evolutionary biology: biological, philosophical and social science perspectives”

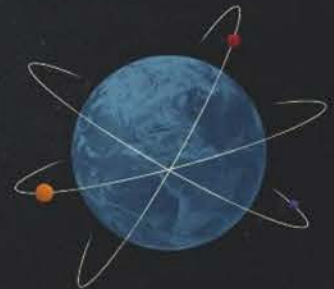
“Developments in evolutionary biology and adjacent fields have produced calls for revision of the standard theory of evolution, although the issues involved remain hotly contested.”

<https://royalsociety.org/science-events-and-lectures/2016/11/evolutionary-biology/>



Summary of Day/Age View

- God's revelation (Scripture and Nature) are in agreement.
 - Scripture clearly indicates old age
 - Science increasingly confirms Scripture



Internet:

- reasons.org
- godandscience.org
- michaelgstrauss.com

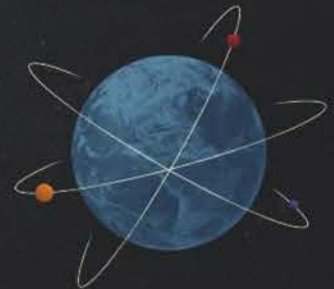
References

Books:

- “Navigating Genesis” by Hugh Ross, PhD
- “A Matter of Days” by Hugh Ross, PhD
- “Who was Adam?” by Fazale Rana, PhD
- “The Creator Revealed” by Michael Strauss, PhD

Local: Reasons To Believe Houston Chapter

- Facebook: RTB Houston TX Chapter
- Meetup: Reasons-To-Believe-Houston-Chapter



Genesis 1 Creation Days

Creation singularity (~ 13.7 billion)

