

Science and the Bible
A Biblical Studies Class
Supplementary Notes – March 2007

Major Points

- The account of the creation of this heaven and earth in the Bible is true.
- Nothing in *proven* science contradicts the Biblical account of creation.
- Numerous scientific discoveries *support* what the Bible says.
- The record of the end of this heaven and earth in the Bible is true.

Introduction

- Gen 1:7 And God made the firmament, and divided the waters which [were] under the firmament from the waters which [were] above the firmament: and it was so.
- Gen 1:16 And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: [he made] the stars also.
- Gen 1:21 God created great whales, and every living creature that moveth
- Gen 1:25 And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and God saw that [it was] good.
- Gen 1:27 God created man in his [own] image, in the image of God created he him
- Gen 1:31 And God saw every thing that he had made, and, behold, [it was] very good. And the evening and the morning were the sixth day.
- Gen 2:2 And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made.
- Gen 2:3 And God blessed the seventh day, and sanctified it: because that in it he had rested from all his work which God created and made.
- Gen 2:4 These [are] the generations of the heavens and of the earth when they were created, in the day that the LORD God made the earth and the heavens,
- Gen 2:7-8 the LORD God formed man [of] the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul

- Gen 2:9 And out of the ground made the LORD God to grow every tree that is pleasant to the sight, and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil.
- Gen 2:19 And out of the ground the LORD God formed every beast of the field, and every fowl of the air
- Gen 2:22 And the rib, which the LORD God had taken from man, made he a woman, and brought her unto the man.
- Gen 3:1 Now the serpent was more subtil than any beast of the field which the LORD God had made.
- Gen 5:1 God created man, in the likeness of God made he him
- Gen 5:2 Male and female created he them
- Gen 6:6 And it repented the LORD that he had made man on the earth, and it grieved him at his heart.
- Gen 6:7 And the LORD said, I will destroy man whom I have created from the face of the earth; both man, and beast, and the creeping thing, and the fowls of the air; for it repenteth me that I have made them.
- Gen 7:4 For yet seven days, and I will cause it to rain upon the earth forty days and forty nights; and every living substance that I have made will I destroy from off the face of the earth.
- Deut 4:32 God created man upon the earth
- Deut 32:18 Of the Rock [that] begat thee thou art unmindful, and hast forgotten God that formed thee
- Ps 90:2 Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting, thou [art] God
- Ps 94:9 He that planted the ear, shall he not hear? he that formed the eye, shall he not see?
- Psa 95:5 The sea [is] his, and he made it: and his hands formed the dry [land]
- Ps 104:30 Thou sendest forth thy spirit, they are created
- Ps 148:5 Let them praise the name of the LORD: for he commanded, and they were created

Pro 26:10 The great [God] that formed all [things] both rewardeth the fool, and rewardeth transgressors.

Isa 37:26 Hast thou not heard long ago, [how] I have done it; [and] of ancient times, that I have formed it?

Is 40:26 Behold who hath created these

Is 41:20 The Holy One of Israel hath created it.

Is 42:5 Thus saith God the LORD, he that created the heavens

Is 43:1 But now thus saith the LORD that created thee, O Jacob, and he that formed thee, O Israel

Is 43:7 I have created him for my glory, I have formed him; yea, I have made him.

Isa 43:21 This people have I formed for myself

Isa 44:2 Thus saith the LORD that made thee, and formed thee from the womb, [which] will help thee

Isa 44:21 Remember these, O Jacob and Israel; for thou [art] my servant: I have formed thee

Isa 44:24 Thus saith the LORD, thy redeemer, and he that formed thee from the womb, I [am] the LORD that maketh all [things]; that stretcheth forth the heavens alone; that spreadeth abroad the earth by myself

Is 45:7-8 I form the light, and create darkness: I make peace, and create evil: I the LORD do all these [things]. I the LORD have created it.

Is 45:12 I have made the earth, and created man upon it

Is 45:18 For thus saith the LORD that created the heavens; God himself that formed the earth and made it

Isa 49:5 And now, saith the LORD that formed me from the womb [to be] his servant, to bring Jacob again to him

Jer 33:2 Thus saith the LORD the maker thereof, the LORD that formed it, to establish it; the LORD [is] his name

- Amo 4:13 For, lo, he that formeth the mountains, and createth the wind, and declareth unto man what [is] his thought, that maketh the morning darkness, and treadeth upon the high places of the earth, The LORD, The God of hosts, [is] his name.
- Amo 7:1 Thus hath the Lord GOD shewed unto me; and, behold, he formed grasshoppers in the beginning of the shooting up of the latter growth; and, lo, [it was] the latter growth after the king's mowings.
- Zec 12:1 The burden of the word of the LORD for Israel, saith the LORD, which stretcheth forth the heavens, and layeth the foundation of the earth, and formeth the spirit of man within him.
- Mark 13:19 The creation which God created
- Rom 9:20 Nay but, O man, who art thou that repliest against God? Shall the thing formed say to him that formed [it], Why hast thou made me thus?
- Eph 3:9 God, who created all things [by Jesus Christ – NOT in Greek text]
- Col 1:16 For by him were all things created
- Heb 11:3 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.
- Rev 4:11 Thou art worthy, O Lord, to receive glory and honour and power: for thou hast created all things
- Rev 10:6 And sware by him that liveth for ever and ever, who created heaven...

Chronology of Bible Events (per Appendix 21, E. W. Bullinger, *The Companion Bible*)

Gen 1:27	Adam	4004 B.C.
Gen 5:3	Seth	3874
Gen 5:6	Enos	3769
Gen 5:9	Cainan	3679
Gen 5:12	Mahalaleel	3609
Gen 5:15	Jared	3544
Gen 5:18	Enoch	3382
Gen 5:21	Methusaleh	3317
Gen 5:25	Lamech	3130
Gen 5:28	Noah	2948
Gen 7:11	Flood Year	2348

Scientific Dating of the Age of the Earth

The generally accepted age for the Earth and the rest of the solar system is about 4.55 billion years (plus or minus about 1%). This value is derived from several different lines of evidence.

Unfortunately, the age cannot be computed directly from material that is solely from the Earth. There is evidence that energy from the Earth's accumulation caused the surface to be molten. Further, the processes of erosion and crustal recycling have apparently destroyed all of the earliest surface.

The oldest rocks which have been found so far (on the Earth) date to about 3.8 to 3.9 billion years ago (by several radiometric dating methods). Some of these rocks are sedimentary, and include minerals which are themselves as old as 4.1 to 4.2 billion years. Rocks of this age are relatively rare, however rocks that are at least 3.5 billion years in age have been found on North America, Greenland, Australia, Africa, and Asia.

While these values do not compute an age for the Earth, they do establish a lower limit (the Earth must be at least as old as any formation on it). This lower limit is at least concordant with the independently derived figure of 4.55 billion years for the Earth's actual age.

- Chris Stassen, *The Age of the Earth*, 2005,
www.talkorigins.org/faqs/faq-age-of-earth.html

Commonly Accepted Earliest Chronology (based on archeology and radiometric dating)

4,550,000,000 B.C.	Earth Formed
4,000,000 B.C.	Earliest Bipedal Hominids
2,500,000 B.C.	<i>Old Stone Age</i> (Paleolithic) Begins – earliest stone tools
1,500,000 B.C.	<i>Homo erectus</i> (larger brain)
600,000 B.C.	Stone industries, including handaxes
200,000 B.C.	<i>Middle Stone Age</i> (Mesolithic) Begins – specialized tools
120,000 B.C.	Neanderthals, <i>Homo sapiens</i>
30,000 B.C.	Earliest cave art
10,500 B.C.	Earliest known pottery

10,000 B.C.	Ice sheets retreat – last ice age comes to an end
10,000 B.C.	<i>New Stone Age</i> (Neolithic) begins
6,500 B.C.	Earliest cultivation, textiles, and domestication of cattle
6,200 B.C.	Earliest copper smelting
5,500 B.C.	Earliest known irrigation
5,000 B.C.	Gold and silver objects made
4,500 B.C.	<i>Bronze Age</i> Begins – earliest bronze tools
4,500 B.C.	Earliest plows used, first use of sails
3,500 B.C.	Development of first urban civilization
3,250 B.C.	Earliest writing
1,000 B.C.	<i>Iron Age</i> Begins – earliest iron tools

- *Past Worlds, Collins Atlas of Archaeology*

“YOUNG EARTHERS” DISPUTE THIS (Borders Press, Ann Arbor: 2003)

Examples of Art History (Bruce)

Prior to 4,000 B.C.	Very Crude Cave Drawings
After 4,000 B.C.	Dramatic Improvements in Form and Detail

Biblical Dating of the Earth (Bruce)

Genesis 1:1	In the Beginning God created the heavens and the earth
Gen 1:2	The earth became [<i>hayah</i> – to be or become] without form [<i>tohu</i>] and void
Gen 2:7	Man became (<i>hayah</i>) a living soul
Gen 4:2	Abel was (<i>hayah</i>) a keeper of sheep, but Cain was (<i>hayah</i>) a tiller of the ground
Gen 19:26	She became (<i>hayah</i>) a pillar of salt

- Gen 24:67 She **became** (*hayah*) his wife
- Gen 26:13 He **became** (*hayah*) very great
- Num 26:64 Among these there **was** (*hayah*) not a man
- Judges 13:2 There **was** (*hayah*) a certain man
- I Sam 1:1 Now there **was** (*hayah*) a certain man of Ramathaimzophim
- Isa 45:18 He created it **not** in vain [same Hebrew word: *tohu*]
- II Peter 3 The first, second, and third heaven and earth
- Vss. 5-6 The world that then was (first)...perished (destroyed)*
- Vs. 7 The heavens and earth, which are now (second)
- Vs. 13 New heavens and a new earth (third)

*The earth as we know it was reformed around 4000 B.C.
What occurred before that is covered primarily in two verses (Gen. 1:1-2)*

Biblical Reproduction

- Gen 1:11-12 Then God said, "Let the earth bring forth grass, the herb that yields seed, and the fruit tree that yields fruit **according to its kind** (Hebrew *miyn* – kind, species; Greek *genos* – race, kind, genus), whose seed is in itself, on the earth"; and it was so.
- And the earth brought forth grass, the herb that yields seed **according to its kind**, and the tree that yields fruit, whose seed is in itself **according to its kind**. And God saw that it was good.
- Gen 1:21 So God created great sea creatures and every living thing that moves, with which the waters abounded, **according to their kind**, and every winged bird **according to its kind**. And God saw that *it was* good.
- Ge 1:24 Then God said, "Let the earth bring forth the living creature **according to its kind**: cattle and creeping thing and beast of the earth, *each according to its kind*; and it was so.
- Ge 1:25 And God made the beast of the earth **according to its kind**, cattle **according to its kind**, and everything that creeps on the earth **according to its kind**. And God saw that *it was* good.

- Ge 6:20 "Of the birds **after their kind**, of animals **after their kind**, and of every creeping thing of the earth **after its kind**, two of every *kind* will come to you to keep *them* alive.
- Ge 7:14 they and every beast **after its kind**, all cattle **after their kind**, every creeping thing that creeps on the earth **after its kind**, and every bird **after its kind**, every bird of every sort.
- Le 11:14ff 'the kite, and the falcon **after its kind**
- De 14:13ff "the red kite, the falcon, and the kite **after their kinds**;

Scientific Classification of Humans (*homo sapiens*)

Kingdom: *Animalia*

Phylum: *Chordata*

Subphylum: *Vertebrata*

Class: *Mammalia*

Subclass: *Theria*

Infraclass: *Eutheria*

Order: *Primates*

Suborder: *Anthropoidea*

Superfamily: *Hominoidea*

Family: *Hominidae*

Genus: *Homo*

Species: *sapiens*

- Dennis O'Neil, 2005, http://anthro.palomar.edu/animal/table_humans.htm

Principles of Genetics

Gregor Mendel's (Austrian 19th century monk) conclusions from comparing seven characteristics of 30,000 pea plants through seven generations over eight years:

1. Characters or traits from the parent pea plants passed as unmodified units or "factors" (now called genes) to successive generations in set ratios.
2. Each individual plant contained two factors that specified the form of each trait. One factor came from the egg and one from the sperm.
3. Since each parent would also have two genes, the parents' pairs of genes had to separate during the forming of sex cells so that each sex cell only contained one form of the gene.
4. Chance determined which of the four possible combinations of factors each offspring received.

The three tenets of cell theory:

1. All living things are made of cells
2. Cells only arise from pre-existing cells by division. (In other words, life doesn't arise spontaneously out of nonliving things.)
3. Cells are made of similar compounds with similar characteristics and biochemistries.

Mutations (genetic change) happen frequently within species, for a variety of reasons (spontaneous, chemical, radiation). Most mutations have no visible effect. Some mutations are helpful, leading to stronger traits. Many are harmful, leading to disease.

- Adapted from Edward Willett, *Genetics Demystified*,
(McGraw Hill, New York: 2006)

*No laboratory-proven examples of a living organism
mutating from one genus to another have been found.*

Historic Testimony of Scientists Through the Ages

Isaac Newton & Booker T. Washington

Henry Morris, *Men of Science, Men of God*

Types of Evolution (Bruce)

Microevolution (as documented by geneticists worldwide) is the study of changes within species due to genetic selection and mutation. This can be documented in laboratory studies and fits with the Biblical precedent of all living things reproducing “after their kind (species/genus).”

Macroevolution (as originally postulated by Charles Darwin) is the study of life beginning with nothing except chemical elements and then evolving through chance selection to the present. It is based on at least two *unproven* assumptions:

1. Life can arise spontaneously from chemical elements
2. Live organisms can mutate from one species/genus to another

Darwinism

- History

- Miller-Urey Experiment (1952)

- Wrong Chemicals
- Closed System INCLUDE DIAGRAM
- Wrong amino acids
- Not enough time
- Amino acids immeasurably far from functional and actual life

- Darwin's Tree of Life

- Hypothesis

- Fossil Record

- Cambrian Explosion on 15 yard line!

- 100 years and millions of fossils later...

- Java Man

- March of Apes

- Haeckel's Embryos and Homology

Irreducible Complexity – Natural Selection Does Not Work!

Cilia:

Cilia are whiplike hairs on the surface of cells. If the cell is stationary, the cilia move fluid across the cell's surface. For instance, you've got cilia lining your respiratory tract. Every cell has about two hundred of them, and they beat in synchrony in order to sweep mucus toward your throat for elimination. That's how your body expels little foreign particles that you accidentally inhale.

But cilia also have another function: if the cell is mobile, the cilia can row it through a fluid. Sperm cells would be an example; they're propelled forward by the rowing action of cilia.

There are nine pairs of microtubules, which are long, thin, flexible rods, which encircle two single microtubules. The outer microtubules are connected to each other by what are called nexin linkers. And each microtubule has a protein motor called dyein. The motor protein attaches to one microtubule and has an arm that reaches over, grabs the other one and pushes it down. So the two rods start to slide lengthwise with respect to each other. As they start to slide, the nexin linkers, which were originally like loose rope, get stretched and become taut. As the dyein pushes farther and farther, it starts to bend the apparatus; then it pushes the other way and bends it back. That's how you get the rowing motion of the cilium.

You only get the motion of the cilium when you've got everything together. None of the individual parts can do the trick by themselves. You need them all in place.

For evolution to account for that, you would have to imagine how this could develop gradually – but nobody has been able to do that.

Evolution does not start with the completed trap or completed cilium and take parts away; it has to build things up from the bottom. And all cilia have three critical components that I've mentioned. There have been experiments where scientists have removed one of the three and the cilium doesn't work. It's broken – just like you'd expect it to be, since it's an irreducibly complex machine.

Blood Clotting:

The system of bloodclotting involves a highly choreographed cascade of 10 steps that use about 20 different molecular components. Without the whole system in place, it does not work.

The real trick with blood clotting is not the clot itself...but it is the regulation of the system.

If you make a clot in the wrong place – say the brain or the lung – you will die. If you make a clot 20 minutes after the blood is drained from your body, you will die. If the blood clot is not confined to the cut, your entire blood system might solidify, and you will die. If you make a clot that does not cover the entire length of the cut, you will die.

To create a perfectly balanced blood clotting system, clusters of protein components have to be inserted all at once. That rules out a gradualistic Darwinian approach, and fits the hypothesis of an intelligent designer.

- Michael Behe as quoted in Lee Strobel, *The Case for a Creator*
Zondervan, Grand Rapids: 2004, p. 201-204, 209-210

The simplest single cells are far more complex than anything man has ever made.

PART 3: CONFIRMING THE EVIDENCE OF GOD

Our Expanding Universe

- Greeks considered universe to be eternal and unchanging
- Scientists (starting with Einstein and Hubble) have recently shown that the universe is expanding, which leads them to believe that it had to start as a result of some cause (e.g. “designer”)
- “Big Bang” is their explanation, similar to planting a small seed that blossoms into a large tree

Materialism – Science or Mythology?

The theory that physical matter in its movements and modifications is the only important reality and that everything in the universe including thought, feeling, mind, and will is explainable in terms of physical laws.

Materialism cannot explain the origin of the universe.

Evidence in Science of God's Hand at Work

PSALM 19:1 THE HEAVENS DECLARE THE GLORY OF GOD

ROMANS 1:18-20 THE INVISIBLE THINGS OF GOD...ARE CLEARLY SEEN...

- Cosmological Constant
- Earth's Position in the Galaxy
- Tectonic Plates
- Cycles – Carbon, Oxygen, etc.

The New Heaven and Earth (Bruce)

John 3:16 Whosoever believeth in him should not perish (Greek *apollumi*: be destroyed, abolished, put to an end), but have everlasting life

I Cor 1:18 For the preaching of the cross is to them that perish (*apollumi*) foolishness

I Cor 15:12-23 Then they also which are fallen asleep in Christ are perished (*apollumi* - vs. 18)

Heb 2:14-15 Deliver them who through fear of death were all their lifetime subject to bondage (He himself likewise also partook of the same, that through death He might render powerless him who had the power of death, that is, the devil - NASB, vs. 14)

Rom 8:22 The whole creation groaneth and travaileth in pain

I Thes 4:13-18 The dead in Christ shall rise first: Then we which are alive and remain shall be caught up together with them in the clouds (vss. 16-17)

II Cor 12:1-4	Caught up (away) to the third heaven
Rev 2:7	The paradise of God
Rev 20:1-6	First Resurrection (Death hath no more power, dieth no more)
Rev 20:7-15	Second Resurrection (Some to second death)
Rev 21:1-8, 23	New Jerusalem (first: former)

Recommended Reading

- Lee Strobel, *The Case for a Creator*
- Michael Behe, *Darwin's Black Box*
- Henry Morris, *Men of Science, Men of God*
- Phillip Johnson, *Darwin on Trial*
- Jonathan Wells, *Icons of Evolution*

Bibliography (in addition to books listed above)

Campbell, Neil A. and Reece, Jane B., *Biology, 7th Edition*, Pearson Benjamin Cummins: San Francisco, 2005