

# Genesis 1 and Science Side by Side

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It is widely accepted in Mormon circles that Moses was an eye witness to the creation of the earth and that he authored the book of Genesis according to this experience. Some may assume that Moses observed the creation from “outside” the universe and should therefore have seen the “Big Bang” and all of the cosmos being created before the earth; thus the sun, moon and stars should have been created before day four. This line of reasoning overlooks the possibility that Moses viewed the creation of the earth from the perspective of the earth. In Moses 1:35, the Lord says to Moses regarding the Creation story: “But only an account of this earth, and the inhabitants thereof, give I unto you.” From this premise, it is possible to read chapter one of Genesis as agreeing with the scientific view of earth’s creation.

## Genesis

## Science

## Reconciliation

DAY 1

PRE-HADEAN EON

MUCH MORE THAN 4.6 BILLION YEARS AGO

1 In the beginning God created the heaven and the earth. 2 And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.

Prior to the Hadean Eon, our solar system consists of dark dust and gases slowly rotating around a central point where the sun would ultimately coalesce. The play of internal gravity on the matter creates a fluid, liquid-like appearance similar to water.

Both accounts agree that light comes first. Genesis, using phrases such as “earth was without form, and void” is entirely consistent with the scientific account.

The visual appearance of the elements that would create the earth could have had a quality and appearance like fluid or water.

3 And God said, Let there be light: and there was light.

Heat and light emanate from the sun as it comes into existence. However, from the vantage point of where the earth would be, the mass of dust and gases make the sun indistinct.

If one were located in the vicinity of the earth (or what would become the earth), light would have been apparent first, and then a division between light and darkness would have occurred as the earth first begins. Incidentally, another Hebrew rendering of the word that was translated as “created” could be “organized,” which nicely describes the process proposed by science.

HADEAN EON

3.8 TO 4.6 BILLION YEARS AGO

4 And God saw the light, that it was good: and God divided the light from the darkness. 5 And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.

Later, loose matter coalesces into planets. The earth forms, revolving around the sun, and spinning on its axis for the day-and-night effect. Likely this occurred 4,600 million years ago. The oldest rock on earth is dated at 3,800 million years.

DAY 2

ARCHEAN EON

2.5 TO 3.8 BILLION YEARS AGO

6 And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. 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. 8 And God called the firmament Heaven. And the evening and the morning were the second day.

The oceans come into being largely through the cooling of the crust and atmosphere, and are eventually able to support life, starting with single-celled organisms. An evaporation-precipitation cycle ensues. No consistently dry land is in evidence yet, possibly due to tectonic issues and the lack of polar ice caps.

Both accounts agree that oceans come next and that there are clouds above them. The use of “heaven” and “firmament” in Genesis refer to the sky and air in this case. Genesis’s omission of single-cell organisms or other minute details should not be deductions from Genesis’s summary of events. This is consistent with what a human eyewitness would have seen and reported.

## Genesis

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## Reconciliation

DAY 3

SILURIAN PERIOD

408-435 MILLION YEARS AGO

9 And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so. 11 And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so.

1 billion years later, defined, dry, continental land manifests itself. The continental split that creates the Atlantic Ocean will not happen for another 260 to 290 million years. Land plants are prevalent. Life in the ocean has progressed to more complex, fish-like creatures. The Venus-like atmosphere is still full of greenhouse-type gases that limit visibility and completely obscure the sky.

Both accounts agree on the state of land and plants. Both accounts are consistent with what someone standing on the earth would have seen.

DAY 4

SILURIAN PERIOD

408-435 MILLION YEARS AGO

14 And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years.

Oxygen makes up a larger percentage of the atmosphere, having displaced the greenhouse gases such as methane and carbon monoxide. The atmosphere clears, and the sun, moon, and stars become visible from the earth's surface (occasional water vapor clouds notwithstanding).

While there is some debate on the exact timing, accounts agree that plants and even some lower life forms appear before the atmosphere is clear enough to see through. A local observer may have experienced the sun, moon, and stars appearing "suddenly": a relative term for a process that takes place over a short few million years or less.

DAY 5

DEVONIAN 360-408 million years ago,  
PENNSYLVANIAN 286-320 million years ago,  
TRIASSIC 208-245 million years ago, and  
JURASSIC 145-208 million years ago

20 And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven. 21 And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind.

Life emerges from the water, starting with amphibians (Devonian Period), reptiles (Pennsylvanian Period), dinosaurs (Triassic Period), and birds and small mammals (Jurassic Period).

Both accounts are still consistent, including the suddenness of the appearance of diverse creatures after 3 to 4 billion years of slow change. The Hebrew word that was translated to "great whales" (verse 21) could also have been translated to "sea monsters" which could be a fair description of some dinosaurs and other animals that lived near or in large bodies of water.

DAY 6

CENOZOIC ERA

66 MILLION YEARS AGO TO NOW

24 And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind: and it was so. 26 And God said, Let us make man in our image, after our likeness.

100,000 years ago or less, or some 66 million years after large mammals appear, modern human beings appear. By this reckoning, 99.998% of the earth's existence has passed without human beings. This is compared to the dinosaurs that lived during 4% of the earth's existence, and ocean life that has lived during 9% of the earth's existence—and counting.

Both accounts state that mammals (beasts, cattle, and creeping things) materially come into being after all the other types of life. Both accounts state that, later in the same day (or era), human beings appear on the earth.