

Dating Rocks and Dead Things

*Thou, even thou, art Lord alone; thou hast made heaven,
the heaven of heavens, with all their host, the earth, and all things that are therein,
the seas, and all that is therein, and thou preservest them all;
and the host of heaven worshippeth thee.*

Nehemiah 9:6

Many scientists claim the earth is around 4.55 billion years old, and that the Bible's shorter timeline of only thousands of years is wrong. Many Christians are intimidated by these claims, and often especially so by all the seemingly sophisticated and nearly impossible to understand terminology of their arguments. I hope to make one of those "sciencey" topics that are used to discredit the Bible more simple and easy to understand, and also show that sometimes what looks like an enemy turns out to be a friend in the end. There will be a few big words, but don't get nervous: you don't have to pronounce them if you don't want to!

Radioisotope Dating

It's time for a very condensed lesson on radioisotope dating (also known as radiometric or radioactive dating). There are often a lot of big words involved, but the concept behind it is fairly simple. First, elements are the basic building blocks of matter. There are many different types of elements, many of which are very familiar, such as iron, gold, carbon, etc. Certain elements are radioactive, or unstable, and they decay over time into a different, stable form. The unstable form is often called the "parent element", and the stable form it decays into is often called the "daughter element." In radioisotope dating, the idea is that when a rock forms (such as when lava cools), the "parent" elements start to decay. Since we can test and find out at what speed various elements decay, the amount of the parent element can be compared to the amount of the daughter element, to determine how long ago the rock formed. It is through this type of method that the earth has been claimed to be around 4.55 billion years old.¹ Obviously, this is much older than the approximately 6,000 years in the biblical timeline. Does this mean the Bible is wrong? Let's take a closer look.

Faulty Assumptions Involved

There are a lot of assumptions involved in the radioisotope dating process. First, it is assumed that when the rock formed, there was no daughter element in the rock, only the parent element. Then, it is also assumed that the decay speed hasn't changed, and that the rock has not been contaminated with extra parent or daughter element from somewhere else. If any of these assumptions are false, then the age they got from these assumptions is also false. We weren't there to see the rocks form, so radioisotope dating is often built on unreliable assumptions.

Old Ages from New Rocks

In addition to unreliable assumptions, there have been instances of modern rocks that were observed to form in recent times that have been tested with radioisotope dating. Following the major eruption in 1980 of Mt. St. Helens in Washington, there were smaller eruptions and lava flows. One of these lava flows formed a dacite dome in 1986. The potassium-argon radioisotope method was used to date the lava flow, and it yielded a date of 350,000 years.² Obviously, 1986 wasn't that many years ago, and this provides more evidence that radioisotope dating currently isn't very reliable.

Carbon-14

There is another similar dating method that uses a radioactive type of carbon known as carbon-14 (C-14). It works the same way as the radioisotope dating methods we have covered already, except that it is used on fossils instead of rocks. You see, C-14 is formed in the upper atmosphere, and living things breathe in or otherwise absorb it. When an organism dies, it stops absorbing C-14, and the C-14 starts to decay into a stable form of carbon. Once again, scientists compare the amounts of the parent and daughter elements to determine an age for the fossil. Of course, this method still has the same assumptions and resulting problems that we covered earlier.

Max Lifespan of C-14

Something different about carbon-14 is that it decays much faster than some other elements. Its decay rate is described in terms of its half-life (the amount of time it takes for half of the remaining C-14 to decay), and it has a relatively short half-life of 5,730 years. This means, that at a maximum age of 100,000 years or so (to be generous), there should be no C-14 left, at least not enough to detect.

In a fascinating twist, C-14 has been found in fossils that are claimed to be millions of years old, far past the time that all the C-14 should have decayed. And it has not just been in one fossil—for example, it has been detected in fossilized wood, dinosaurs, and fish.³ This strongly suggests that these fossils cannot be millions of years old.

The Bible is right, and the Gospel is right.

When we look closer at radioisotope dating, we see that, far from being rock-solid evidence that the Bible's timeline is wrong, the dates produced from radioisotope dating are mostly unreliable. And carbon-14, with its short life-span, being found in fossils that are supposedly millions of years old, seriously calls into question their conventional ages and supports the Bible's history.

I like to wonder if maybe God intentionally left some of these clues, such as C-14 in dinosaur fossils, just to remind us of the truth of His Word. The more we discover in science, the more it continues to line up with the Bible. And the God who gave us the true history of the world also wants a relationship with us. He sent His Son to redeem us from the sin that separates us from Him, so we could have eternal life with Him. Have you been redeemed?

~Denton Ford

¹ G. Brent Dalrymple, "The age of the Earth in the twentieth century: a problem (mostly solved)", *The Age of the Earth: From 4004 BC to AD 2002*, C. L. E. Lewis, S. J. Knell, (2001) DOI:10.1144/GSL.SP.2001.190.01.14

² Dr. Steven A. Austin, "Excess Argon within Mineral Concentrates from the New Dacite Lava Dome at Mount St. Helens Volcano," *Creation Ex Nihilo Technical Journal (Answers In Genesis)*, Vol. 10, no. 3, (1986) pp. 335-343

³ Brian Thomas, Vance Nelson, "Radiocarbon in Dinosaur and Other Fossils," *Creation Research Society Quarterly*, Volume 51, (2015)