

Note to Reader:

The purpose of this document is to point out the scientific errors found in many textbooks with a focus on radioactive dating. Only documented scientific and factual statements are used.

## CHAPTER 4

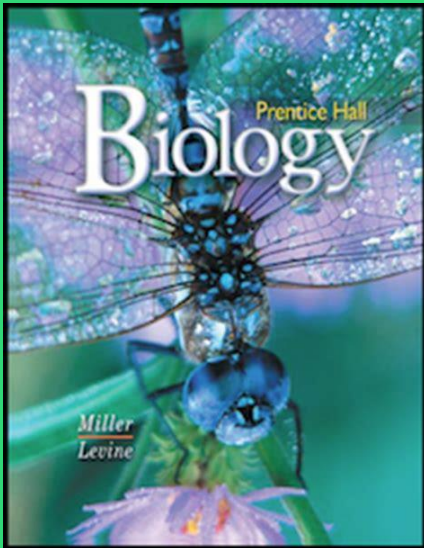
# Radioactive Dating



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## What Does the Textbook Teach?



The textbook will say that if you measure the radioactive decay of certain elements that make up a substance, you can determine the age. (Section 1)

The textbook will say that because of research in this field, the Earth is millions of years old. (Section 2)

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## Section 1

### Why Dating Methods Fail:

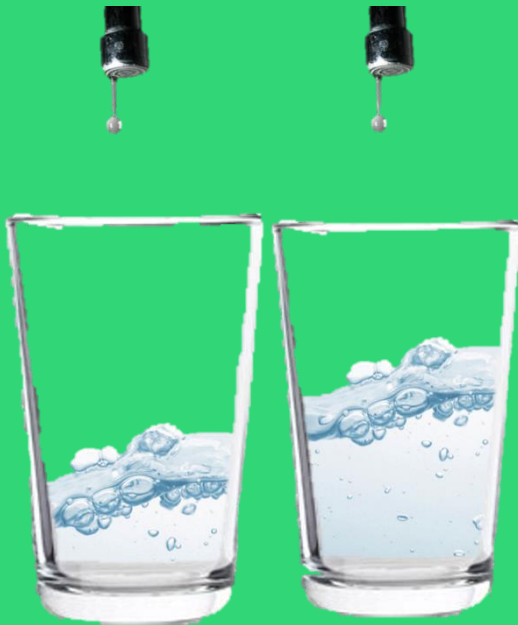


Fig 4.1.1 Water filling up a glass.

One of the main problems with modern dating methods is that it is based on unverifiable assumptions.

Simply put, imagine a glass of water that is half full. Now imagine that water is dripping into the glass that fills it at an average of one tenth of a glass per hour (Figure 4.1.1).

How long has this faucet been dripping into the glass?

You might conclude that it has been on for five hours, but this is not necessarily true. You are assuming that there was no water in the glass to start with (starting amount), no water evaporated (closed system), and that the water has always been dripping at the same rate (Half-Life Rate).

These assumptions can radically shift the answer.

Let us compare this to radioactive dating.

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$$A = A_0 * 2^{(-t/h)}$$

A=Ending Amount

A<sub>0</sub>=Starting Amount

t=Time Elapsed

h=Half-Life Rate

Fig 4.1.2 Half-Life formula

**To accurately calculate the time elapsed, you need to know the starting amount, the ending amount, and the half-life rate (Figure 4.1.2) and assume that there is a closed system.**

Radioactive elements decay from one element (parent compound) to another element (daughter compound) (Figure 4.2.2). If there is any of the daughter compound present at the start of the reaction, it will look older than it is. This is the equivalent of having some water in the glass before the faucet was turned on.

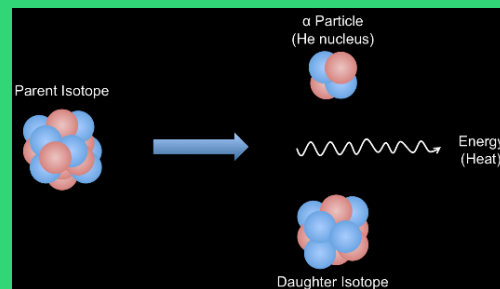


Fig 4.2.2 Radioactive decay illustrated.

We also have to assume a completely closed system. Any outside force that alters the environment can change the decay rate. If water washes away some of the compound or a dog eats part of the sample, the numbers will change. In essence we are assuming that no water evaporated or was poured out of our glass.

Finally, we are assuming that the half-life rate was always the same and no factors were involved to change the rate. This would be the equivalent of changing the flow of the faucet during the experiment.

Since measuring radioactive decay is based entirely in unverifiable assumptions, it cannot be trusted.

## Section 2

### How Dating Methods Fail:

Now that we have established that the modern dating methods cannot be trusted from a theoretical standpoint, can they be trusted in practice?

There are actually a plethora of examples too numerous to list here. However, let us examine a few:



Fig 4.2.1 A diamond containing C14

- The decay rate of Carbon 14 is about 5,730 years, but scientists have found statistically significant amounts in diamonds (Figure 4.2.1) that are supposedly millions of years old.

• The lower leg of the Fairbanks Creek mammoth (Figure 4.3.2) had an age of 15,380 years, while its skin and flesh were 21,300 years, according to Harold E. Anthony. This is a discrepancy of 72% or 5,920 years.



Fig 4.2.2 A mammoth dated at two different ages.

- Living mollusk shells were carbon dated as being 2,300 years old according to scientists, M. Keith and G. Anderson.



Fig 4.2.3 A living seal dated at thousands of years old.

- A freshly killed seal (Figure 4.2.3) was carbon dated as having died 1,300 years ago according to the *Antarctic Journal* in 1971.

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- **Shells from living snails were carbon dated as being 27,000 years old according to *Science*.**

These are just a few examples. It seems that radioactive dating is not a reliable method since we cannot observe the events that occur. In addition, when events are observed, the dating method is called into question.

Furthermore, if the dating methods give two different dates, the evolutionist will use the date that best fits the evolutionary timeline (the geologic column).

## Section 3

### When To Use Dating Methods:

Based on what we have learned, it will come as no surprise to learn that most scientists do not actually use radioactive decay to date tissue, fossils, and rocks. This is because scientists realize how inaccurate radioactive dating can be.

Radioactive dating is only used when the results support the evolutionary worldview. In general, if you were to take a sample to a lab to have them date it, the scientist would ask you what layer it was found in before dating it.

This is not to determine the environment, but it is so they can find out which layer it is in. Because the layer dates the fossils “more accurately” than any dating method.

Aside from sciences such as anthropology (the study of people and cultures), these dating methods are rarely used. Even when anthropologists use radioactive dating, they will still only use the date that best fits the observational data.

In fact, different dating methods can provide very different results.

On May 18, 1980, Mt. St. Helens (Figure 4.3.1) erupted. Cooled lava was pulled in 1992 and Potassium-Argon dated to be 350,000 years old. Ever since it hardened, the “radiometric clock” should be at zero. Furthermore, the minerals were



Fig 4.3.1 Mt. St. Helens

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**dated to be 2.4 million years old. There is not a single other field of science where such a large margin of error would be accepted.**

Polonium has a very short half-life (three minutes at most). The textbook will say that the Earth's surface was molten from its formation that eventually cooled down. However, there are polonium "halos" (Figure 4.3.2) that are present in stone such as granite. If the polonium was in stone that slowly cooled and hardened over millions of years, such halos should not exist.

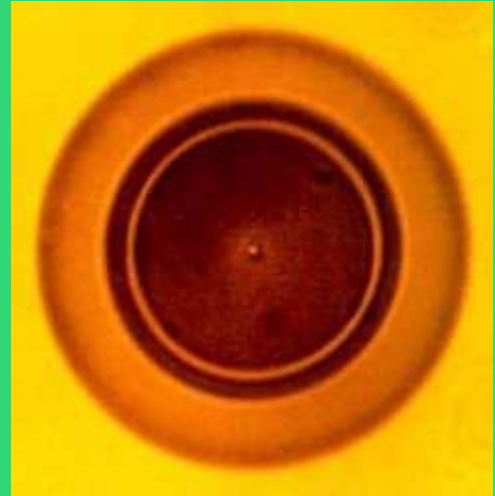


Fig 4.3.2  
Polonium Halos



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## **IN CONCLUSION:**

**In reality, radioactive dating methods are flawed based on unverifiable assumptions. (Section 1)**

**If dating methods cannot be supported by historical data, the radioactive date is rejected. (Section 2)**

**Radioactive dating cannot be trusted since it can give dates that differ even by hundreds of thousands of years. (Section 3)**



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## **Questions for Further Discussion:**

- 1. Why would scientists use a dating method that is unreliable as a standard? (Section 1)**
- 2. Why would scientists use an unreliable dating method only when they do not have historical data to find the age? (Section 2 & Section 3)**
- 3. Is there another hypothesis that will explain these phenomena?**

