



# How Old Is the Earth?

# 6

## Key Themes

- The Bible records the true history of mankind and the universe.
- God's Word must be the absolute authority.

## Key Passages

- Genesis 5:1–32, 11:10–26

## Objectives

Students will be able to:

- Identify the source of the biblical age of the earth.
- Identify the source of the secular age of the earth.



## Lesson Overview



### Come On In

page 5

Students get answers to some Big Questions about creation as they pull questions from the cup and determine the answers from the Bible.



### Studying God's Word

page 5

The Bible provides a clear date for creation, showing a young earth. The radiometric dating methods used by many to determine the earth's age as billions of years old are flawed and go against God's Word.



### Activity 1: How Old Is the Earth?

page 7

Students will determine the age of the earth using Genesis and other sources.



### Activity 2: Problems with Radiometric Dating

page 9

Students will watch a DVD clip with Dr. Andrew Snelling briefly explaining the flaws with radiometric dating methods.

# Lesson Preparation

## WHAT YOU WILL DO

## WHAT YOU WILL NEED



### COME ON IN

- Gather Big Questions and answer key you used and prepared from the previous lessons. The information is on the Resource DVD-ROM, Lesson 1.

- Cup with Big Questions
- Big Questions answer key



### STUDYING GOD'S WORD

- Study the Prepare to Share section.
- Go Before the Throne.
- Print the Lesson Board Work outline from the Resource DVD-ROM.

- Student Take Home Sheets
- Lesson Board Work outline



### HOW OLD IS THE EARTH?

- Print one How Old Is the Earth? worksheet from the Resource DVD-ROM. Make one copy of the Scripture sheet and worksheet for each student, and keep the answer key for your own use.

- How Old Is the Earth? Scripture sheet and worksheet for each student
- How Old Is the Earth? answer key
- Pencils
- Calculator (optional)



### PROBLEMS WITH RADIOMETRIC DATING

- Preview video clip, "Does Radiometric Dating Prove the Earth is Old?" (3:51) video clip on the Resource DVD-ROM.

- "Does Radiometric Dating Prove the Earth is Old?" (3:51) video clip.
- DVD Player and TV or Computer



## Memory Verse

**Exodus 20:11** For in six days the Lord made the heavens and the earth, the sea, and all that is in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it.

► **Pace your lesson!** You can use the provided clocks to indicate the time each section should be completed to keep the lesson on schedule. While teaching, you can compare your anticipated times with the actual time and shorten or drop sections as necessary.





# Prepare to Share

## SCRIPTURAL BACKGROUND

Begin your preparation this week by looking at these key passages: Genesis 5 and Genesis 11:10–26.

So, now that you've read the key passages listed above, is your head spinning? We often rush through the genealogies of the Bible, laughing at our inability to pronounce the difficult names. But this time, take note of the details given in these two chapters. Genesis 5 recounts the ten generations before the Flood; Genesis 11 lists the ten generations after the Flood. When God includes such specific details, He intends for us to take notice.

Unlike a genealogy that simply lists the order of lineage, these passages contain ages and enough detail for the reader to determine the time span. They serve as "birth certificates," and allow us to calculate the time from Adam to Abraham. Each generation builds on the one before it, so we can add the years together to determine when Adam was created and the approximate age of the earth.

As we add up the years from Adam to Abraham, we get approximately 2,000 years. Historically it has been agreed upon by Christian and non-Christian historians alike that Abraham lived about 2,000 years before Christ. If we add the 2,000 years that have passed since Jesus's birth, we get an accurate age of roughly 6,000 years.

Were there billions of years that passed *before* Adam was created? No! The Bible says that Adam was created on the sixth day of creation (Genesis 1:26, 31) and that God created at the "beginning" (Genesis 1:1). Jesus Himself confirmed His belief in the creation account when He acknowledged that Adam and Eve were created at "the beginning of creation" (Mark 10:6).

There are many Christians and non-Christians who, in an attempt to make the universe older than it is, will say there are gaps in the genealogies recorded in Genesis. They argue that the word *begat* allows for generation skipping. However, the Hebrew word for *begat* (*yalad*) means a literal father/son relationship. Nowhere in the Old Testament is *yalad* used in any other way than to mean a single-generation (father/son or mother/daughter) relationship.

The genealogies are important to our history and should be read just as they are written. They are given to us to verify that the Bible is real history and that we are all descendants of a real man, Adam. We can

trust these genealogies to give us accurate information because they are a part of the infallible, inerrant Word of God.

## APOLOGETICS BACKGROUND

The belief that scientists have "proved" the earth to be billions of years old is a major reason many in the church have abandoned the biblical account of creation. However, contrary to popular belief, radiometric dating does not prove the earth is old.

All radiometric dating methods are based on the rate that radioactive elements decay in the rocks. Geologists refer to "parent" elements in rock decaying to "daughter" elements in the rock. By measuring how much "parent" and "daughter" elements are in a specimen, scientists try to calculate how old it is.

However, these methods are based on assumptions that are neither testable nor provable. These old-earth geologists come up with faulty dates because they are relying on faulty assumptions. These assumptions are:

1. The assumption that we know the starting conditions of these rocks—particularly the ratio of parent atoms to daughter atoms in the rocks to begin with. No one can definitively explain the starting conditions because no one was there when they were formed. It is impossible to know the ratio when the rock was formed, so secular scientists assume there was 100% parent and no daughter.
2. The assumption that all of the daughter atoms found in a rock were formed from the parent atoms in the same rock. We have no way of knowing for sure that all of the daughter atoms in a rock came from parent atoms in the same rock. Contamination of some sort, from ground water, for example, could add or eliminate parent and/or daughter atoms to the rock making any dating of this type unreliable.
3. The assumption that the rate of decay has always been constant. This is a dangerous assumption given that we weren't there and we don't know if the rate of decay has been the same over thousands of years.

In addition to these assumptions, there are documented examples of inaccurate radiometric dating. Following are just a few examples:

- A sample of the lava dome in the Mount St. Helens crater (that had been observed to form and cool in 1984) was analyzed in 1996. It contained so much

argon-40 (daughter atoms) that it had a calculated “age” of 350,000 years!

- Lava flows on the sides of Mt. Ngauruhoe, New Zealand, known to be less than 50 years old, yielded radiometric “ages” of up to 3.5 million years.
- The same basalt flows on the top of Grand Canyon were tested using three different dating methods. The “ages” calculated were 916 million years, 1.143 billion years, and 2.6 billion years!

God’s Word unmistakably teaches a young earth and universe. God has ensured the accurate recording and preservation of His eyewitness account of the earth’s history, which Jesus Christ endorsed repeatedly during His earthly ministry. We must have confidence in what God has revealed to us in His Word and not allow man’s ideas to cause us to reinterpret it or compromise it in any way.

## HISTORICAL BACKGROUND

For centuries Christians have believed that God created the world in six literal days roughly 4,000 years before Jesus’s birth and that He judged the world by destroying it in the Flood of Noah’s day. It is only over the last 250 years that questions about the Bible’s record of time have arisen. Why? Christians and non-Christians swayed by the words of men began to try to fit billions of years of earth history into the Bible. The anti-biblical, philosophical assumptions that were used to interpret rocks and fossils threw the door wide open for doubting, manipulating, and questioning God’s Word.

Even before the technology of radiometric dating was available, the shift in belief from the young earth to the faulty old-earth theories invented by man was leading to the idea of Darwinian evolution. Consequently,

an avalanche of anti-biblical science appeared on the scene. It wasn’t long before many church leaders began to embrace the old-age theories and made efforts to fit the ages into the Bible. Today, placing man’s knowledge above what Scripture says has become commonplace. Sadly, interpretations of science, and tradition, often influence Christians more than Scripture itself.

But does the age of the earth really matter? Consider this. The Bible gives a detailed record of the age of the earth in the Genesis genealogy passages. Choosing to discount that part of the Bible because it doesn’t line up with what we’ve heard from the scientific community, or the media, is placing man’s knowledge above the authority of Scripture. If we are unable to take Genesis 1–11 as documented history, then how are we to believe the rest of the Bible? The Bible must be the final authority on all the matters it speaks of—not just the moral and spiritual. Every Word of God is true. It is the history book of the universe and we dare not presume to know more than the Creator God.

For more information on this topic, see the Online Resource Page.



## BEFORE THE THRONE

Omniscient and sovereign God, I praise you for your Word. I recognize that it is completely sufficient for me. Your Word is living, and I continue to learn as I study to teach others about you. Show me your wisdom, Lord, and bless my students this week. Use me to present your truth clearly so these children will have a better understanding of the age of the earth, and be prepared to answer the attacks on your Word that are so prevalent today.



## COME ON IN

As students arrive . . .

- They will pick questions from the cup or container and read them aloud.
- They will look up the Scripture on the question slip to determine the correct answer. Refer to the Big Questions answer key for answers.



After all the students arrive, pray with them before beginning the lesson.



## REVIEW

*Using the Lesson Theme posters from previous weeks, quickly review the lessons with your students. Take 5 to 10 minutes to reinforce the important truths the students have heard so far in your class.*

*Children learn by repetition. These posters will reference the lesson title with an illustration to review the key elements of the lesson.*

*Ask the children questions about the previous lessons as you review the Lesson Theme posters. Reflect briefly on the passages you read, bringing the objectives and themes back into focus. This will refresh the truths in your students' minds, and maintain continuity as you teach through the lessons.*

**Let's review our memory verse today by playing a game.** *Refer new students to the Memory Verse poster.*

I am going to go around the table tapping each person on the shoulder. You are to say the word that comes next in the verse after I tap you. The first time around, I'll tap everyone one after the other. The second time around, I will not tap everyone. If I skip someone, I'll raise my hand instead of tapping. That is the signal for everyone to say the word that comes next. Then the next person I tap will take it from there. Each time I go around, I'll either tap a shoulder or raise my hand. Be ready to say the next word in the verse when I tap you or when I raise my hand.

*Have students remain seated while you move around tapping them on the shoulder. The person tapped says the next word of the verse. Continue until the verse has been said completely several times around the table.*



## Studying God's Word

### READ THE WORD

There are a lot of different ideas about how old the earth really is. It seems we are always hearing different numbers—but those numbers are often in the millions and billions of years. We know that God's Word can be trusted as the absolute authority for truth. Today, let's discover for ourselves what God says about the age of the earth.

## EXAMINE THE WORD

### Observe the Text

Genesis 5:3, 5:6,  
5:9, 5:12

**Begot:** to  
become the  
father of

Genesis 5:1

► Print the Lesson Board Work outline from the Resource DVD-ROM for easier planning.

**Genealogy:**  
the study of a  
family tree

Genesis 5:32

Genesis 11:10

Genesis 11:26

? We are going to study chapters 5 and 11 in the book of Genesis. Turn to Genesis 5. There is a word used in this chapter that you may not be familiar with. It is repeated over and over. Look in Genesis 5:3, 5:6, 5:9, 5:12. The word is in all of those verses and more. What is that word? *Assign each verse to one student to read. The term is begot.*

? Yes, begot. Do you know what that means? *Allow for answers.*

That word means to be the father of. In this context it means a father had a son.

? Someone read Genesis 5:1. What kind of book does it say this is? *A book of genealogy.*

? Who can tell me what a genealogy is? *Allow for answers. Write on the board, "genealogy."*

A genealogy is just a study of ancestors, or the people in your family. It is like a family tree. It traces your parents, grand-parents, great-grandparents, great-great-grandparents, and so on as far back as you can go. And Genesis 5 is a genealogy from God. It will help us to determine how old the earth really is.

? Who does this genealogy begin with? Look in Genesis 5:1 again. *Adam. Write on the board, "Genesis 5:1—Adam."*

? Now go to Genesis 5:32. Someone read that for me. Who ends this chapter? *Noah. Write on the board, "Genesis 5:32—Noah."*

? And who did Noah "beget"? Who were his sons? That is still in Genesis 5:32. *Shem, Ham, and Japheth. Write on the board after Noah, "Shem," "Ham," and "Japheth."*

So Genesis 5 shows us the generations from Adam (Genesis 5:1) all the way to Noah and his sons (Genesis 5:32). *Write on the board, "Genesis 5—Adam to Noah."*

? Now turn to Genesis 11:10. Who does this passage begin with—Genesis 11:10? *Shem, Noah's son. Write on the board, "Genesis 11:10—Shem (Noah's son)."*

? And look at Genesis 11:26. Who is mentioned there? *Terah.*

? And who did Terah "beget"? Who were his sons? *Abram, Nahor, and Haran. Write on the board, "Genesis 11:26—Terah, Abram, Nahor, Haran."*

Right. Chapter 11 shows us the generations from Shem (Noah's son) to Abram. And we are especially interested in Abram—or Abraham as he later was called. *Write on the board, "Genesis 11—Noah to Abraham."*

### Discover the Truth

So, we have these very detailed genealogies in Genesis 5 and Genesis 11. These genealogies start with Adam and go all the way to Abraham. *Circle "Adam" and "Abraham" on the board."*

These lists give us what we need to figure out how old the earth is. God told us how old each father was when his son was born. By adding up all these numbers, we can see that the earth is young. It is about 6,000 years old—not billions of years old. Let's see how now!



## How Old Is the Earth?

### MATERIALS

- How Old Is the Earth? Scripture sheet and worksheet for each student
- How Old Is the Earth? answer key
- Pencils

### INSTRUCTIONS

*Pass out the How Old Is the Earth? worksheets.*

Because our Bible passages today are very long, we'll study them a little differently. We're going to work together, read the Scripture, and fill out this worksheet. We need to find what the father's age was when he had his son. Then we will add up all the numbers and see if we can come up with the age of the earth. The passages in Genesis 5 and 11 are on page 1 of the worksheet.

We will start with Genesis 5. These verses will tell us the number of years between Adam and Noah. Look at each Scripture reference and then fill in the proper column. We will add the ages together to get the total number of years between Adam and Noah from Genesis 5. *Work through Genesis 5 with the class. Helping them to find the right verse, the age of the patriarch, and fill it in.*

Now we will go to Genesis 11 and do the same thing. This will tell us the number of years between Noah and Abraham. *Work*

*through Genesis 11 with the class helping them find the right verse and age to be filled in.*

### CONNECT TO THE TRUTH

*You can explain how we get the total age of the earth and fill in the bottom portion of the worksheet. Remind the students that although the Bible doesn't state it specifically, biblical scholars agree that the years between Abraham and Jesus were about 2,000. Making the age of the earth 6,000 years old*

These genealogies show us that there is no mystery to the age of the earth. Let's add up the years. From Adam to Noah we have 1,056 years. From Noah to Abraham we have 890 years. That is a total of 1,946 years from Adam to Abraham. *Have children fill in their worksheets.*

So, let's say about 2,000 years from Adam to Abraham. And it is widely thought among historians that Abraham lived about 2,000 years before Jesus. And we know based on our date today, that Jesus lived about 2,000 years ago. Fill in those numbers at the bottom of your worksheet. Adam to Abraham—2,000 years. Abraham to Jesus—2,000 years. Jesus to today—2,000 years. *Be sure to refer to the Seven C's Timeline to show all of these segments of time.*

? So what is the point? *Allow for answers.*

God's Word tells us how old the earth is. It is not billions of years old; it is about 6,000 years old.



## Discover the Truth

Let's compare what we just learned about the age of the earth—the biblical truth—to the evolutionary view of the earth's age. Evolutionists teach a theory that starts with a big bang about 13 billion years ago. They think the earth formed about 4.5 billion years ago as a result of that big bang. Their idea is that billions of years passed on earth during which different species eventually evolved into a man.

Scientists use what they call radiometric dating methods to measure the age of rocks—and they believe those rocks can then show them the age of the earth. But these methods are often not right. *Write on the board, "radio" and "metric" as two separate words.*

You can read both of these words. Try it. Now read the two words together as one word to come up with this big scientific term: radiometric. Radiometric dating is a method that measures how many radio active atoms are present in rock.

Mount St. Helens is a volcano that erupted in 1980. Rocks began to form then from the lava that cooled after oozing from the volcano's crater. In 1984, scientists observed a rock that was forming in this way and in 1996 they dated it using radiometric dating. According to their radiometric dating test, that rock was 350,000 years old! *Write on the board, "350,000 years old."*

? The problem was the volcano had just made the rock in 1984. The rock was tested in 1996. How old was the rock when it was tested? *Write on the board, "1996 (rock found) – 1984 (rock formed) = 12 years old!"*

It was only 12 years old! Their test was really off! This type of inaccurate dating has happened over and over again. There are many problems with radiometric dating—and we know it.

For example, scientists have sometimes used these methods to measure the same rock a second time. Sometimes the second test showed a very different age than the first test did. But scientists still proceed as though the testing method were able to give us the truth. Although not accurate, it is often presented as fact even in the books you may study at school.

? If something is printed in a textbook, or said in a documentary, does that make it true? *No.*

But God's Word is accurate. It is always true and never changes.







## Problems with Radiometric Dating

### MATERIALS

- “Does Radiometric Dating Prove the Earth is Old?” (3:51) video clip on the Resource DVD-ROM
- DVD Player and TV or Computer

### INSTRUCTIONS

Some of you have been learning about radiometric dating methods in school. The video we are going to see shows a creation scientist describing the flaws in those types of dating methods. It’s a little technical, but this is good information to help you understand that the radiometric dating methods aren’t as perfect as you may have been led to believe. Dr. Andrew Snelling is a geologist and an expert in dating methods. This is just a short clip to get you thinking about dating methods that claim to prove the earth is billions of years old. *Play the clip from the Resource DVD-ROM.*

### CONNECT TO THE TRUTH

Wow! Some of this is really difficult to understand. Let’s review. Radiometric dating is a method that measures how

many radioactive atoms are present in rock. But this method has flaws. Those scientists who use this method make assumptions about what happened to the rocks in the past—assumptions which cannot be tested or proven. Remember that many other scientists, like Dr. Snelling on the video, wisely trust the Word of God to give them the starting point for their study.

? After learning more about radiometric dating, do you think that method can prove the earth is billions of years old? *No.*

? Why not? *Allow for answers*

It is not accurate. And even though scientists know that it is not a good way to tell how old things are, they still use it. You see, radiometric dating is a method made by man. When man tries to figure out the truths of life, science, or history, without the Bible he will come up with the wrong answers. But if we start with the Bible, we can find answers that make sense. The Bible is like a pair of glasses that help us see the world correctly.



## Applying God’s Word

### WHAT YOU HEARD IN THE WORD

Today we saw how the age of the earth is revealed to us by God in Scripture. You had an opportunity to see exactly how the ages and names listed in Genesis 5 and 11 come together to give us an amazing “birth certificate” for the earth. We can use the Genesis passages, along with other historical resources, to calculate the age of the earth today.

? How old is the earth according to Genesis 5 and Genesis 11? *About 6,000 years.*

So when you hear a scientist say that he knows the earth is 4.5 billion years old because of radiometric dating—you need to remember that

this is not an accurate test. Not only that, it is completely against what we learned in God’s Word which tells us the earth is 6,000 years old. There is quite a difference between 4.5 billion years and 6,000 years.

Remember that the source of the biblical age of the earth—6,000 years—is the Bible. God put all those genealogies in Genesis to make it easy for us to figure out.

And the source of the secular age of the earth is man’s thinking and radiometric dating which is not accurate. This dating has been proven to be wrong over and over again.

## GOD’S WORD IN THE REAL WORLD

Now that you have learned so much about the age of the earth, what can you do with it? First, I hope you’ll realize how amazing the genealogies in the Bible are. Those names are part of God’s inspired Word and they help us get true information about the world’s history.

Also, the next time you hear anyone discussing the age of the earth, don’t be afraid to speak out. Perhaps some of your friends and family never realized the Bible tells us so many details. They may be as amazed as you were to learn that the genealogies in Genesis 5 and 11 give names and ages of each generation from Adam to Abraham.

? And before you believe all their so-called “evidence” that the earth is billions of years old, what do you have to remember? *Start with God’s Word. Look at everything through your biblical glasses!*

It’s easy to get confused when so many voices are saying the earth is billions of years old. We hear it on TV, in textbooks, in books, and movies. Even some Christians are confused about the age of the earth because they have been convinced that things like radiometric dating methods have “proved” the earth to be billions of years old. But we don’t need to be confused. God’s Word is true. We can always rely on it. And it tells us clearly that the earth is about 6,000 years old.



► Pass out the Student Take Home Sheets and remind the children to practice the memory verse this week.



### MEMORY VERSE

**Exodus 20:11** For in six days the Lord made the heavens and the earth, the sea, and all that is in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it.



### GROUP PRAYER TIME

Be sure to pray with your class before you dismiss them.

- Praise God for the privilege of being able to study His Word in this class.
- Thank God for his Word and the truth it contains.
- Thank God that we can find answers to our questions in His Word.