

Prep for Class 1

Enter Our Adventure with Understanding

Welcome to an exciting exploration of God's Creation. Over the next two years, we will briefly discover aspects of astronomy, geology, meteorology, hydrology, oceanography, zoology, anatomy, and even nutrition! Before we can start our adventure we must lay the proper foundation of truth.

Instructions

Always Start Your Study with Prayer

The most important information you will ever receive is that Jesus loves you and He died for your sins. Even though we are all sinners, God loves us so much that He sent Jesus to die in our place. Because of this undeserved gift of grace from God, we can have a parent-child relationship with the Creator God by receiving His priceless gift by faith. This is summed up in John 3:16, "For God so loved the world, that He gave His only begotten Son, that whosoever believeth in Him should not perish but have everlasting life."

Because the Holy Spirit is our teacher (John 14:26) and it brings God glory when we grow in wisdom and in truth, we should always start anything we are studying (or doing) with prayer. I have found these basic points to make a good "prepare to learn and study" prayer:

1. ask the Holy Spirit to teach you,
2. ask for understanding,
3. ask that He would help you to work hard and with a good attitude to His glory,
4. ask for wisdom and safety whenever you are preparing to do labs,
5. and above all ask that God would be glorified in our study and life.

However you choose to pray, **always start each study with prayer**, dedicating your time to our Creator's glory.

We will be blessed to include the work of Debbie and Richard Lawrence in our study. You will need and be reading three of their excellent books *Our Planet Earth*, *Our Universe*, and *Our Weather and Water* in our study of *All Things Bright and Beautiful* which is the first year of our two year adventure in *The Lord God Made Them All Series*.

Whenever you are given a reading assignment in the *Our Planet Earth*, *Our Universe*, and *Our Weather and Water* books, you do not have to read the beginners section nor do you have to read or do the lab activities which are in blue boxes with a magnifying glass as an icon. Just read the rest of the text and answer the "What Did We Learn" questions. The "Taking it Further" questions are optional for the older students, so that means you don't have to do them.

The Creation Foundation

Please pray before you start.

A wise man once said, “the meaning of anything is wrapped up in its origins.” To understand what we see in God’s creation requires us to have some understanding of the past. Because much of the information available about scientific things today are written by people who believe in evolution, it is very important that you really understand and know a view of science that accepts every word in the Bible as true. We will call this the Creation Interpretation. Please understand there are many views of creation but the one offered here is called Biblical Scientific Creation which interprets the observable scientific facts (rocks, fossils, animals) through the truth found in the Bible, accepting it as correct and true. This view does not bend the Bible to fit science. Instead we bend our science to fit the Bible.

Because many people in our world today don’t view scientific facts through the Bible, it is also very important that you understand how others interpret those facts. Have you ever heard that man came from apes or an ape-like creature that existed long ago? How about the idea that birds came from dinosaurs, that whales and dolphin have an ancestor that lived on land, that manatee are related to elephants, or that all land animals once came from sea creatures? If so, you have already been exposed to the Evolution Explanation.

The word “evolution” can just mean “change” but those who choose to explain the world around them without believing the Bible use a view of science and history based on what we will call the Evolution Explanation. It is the idea that all life on earth (plants, animals, people) came from a cell that formed in the earth’s oceans. Over billions of years, that cell’s offspring changed until all living things that exist today and in the past were formed. We will explore the Evolution Explanation more soon so that you recognize it when you see it and know how to take the facts and interpret them from a Biblical Worldview rather than just accepting the Evolution Explanation of the facts, but first let’s get the Biblical perspective in place.



The Creation Interpretation of Natural History

Natural history is the history of nature instead of focusing on mankind like regular history. So natural history focuses on living things and non-living things (like rocks, fossils, water, land, etc.) especially their origins and how they have changed through time.

It’s important for you to know the Creation Interpretation of natural history because all facts should be interpreted through what is true and the Bible is true. Too many Christians don’t know the Creation Interpretation of science. This can eventually cause them to doubt if the Bible is true because the evolutionary view of science is taught as if it is fact and it is not. You need to know the Creation interpretation of science (1) so you know that you can trust your Bible as absolutely true on whatever subject it mentions and (2) so you can translate the Evolution Explanation into a Biblical worldview.

Please read the following excerpt taken from the Gateway Bible website. This is in the New American Standard Version of the creation account found in Genesis 1:1-2:4. As you read,

use a yellow or orange color-pencil to circle each word "day" in the first chapter of Genesis so that you can easily spot them.

Genesis 1

¹In the beginning God created the heavens and the earth.

²The earth was formless and void, and darkness was over the surface of the deep, and the Spirit of God was moving over the surface of the waters.

³Then God said, "Let there be light"; and there was light.

⁴God saw that the light was good; and God separated the light from the darkness.

⁵God called the light day, and the darkness He called night And there was evening and there was morning, one day.

⁶Then God said, "Let there be an expanse in the midst of the waters, and let it separate the waters from the waters."

⁷God made the expanse, and separated the waters which were below the expanse from the waters which were above the expanse; and it was so.

⁸God called the expanse heaven. And there was evening and there was morning, a second day.

⁹Then God said, "Let the waters below the heavens be gathered into one place, and let the dry land appear"; and it was so.

¹⁰God called the dry land earth, and the gathering of the waters He called seas; and God saw that it was good.

¹¹Then God said, "Let the earth sprout vegetation, plants yielding seed, and fruit trees on the earth bearing fruit after their kind with seed in them"; and it was so.

¹²The earth brought forth vegetation, plants yielding seed after their kind, and trees bearing fruit with seed in them, after their kind; and God saw that it was good.

¹³There was evening and there was morning, a third day.

¹⁴Then God said, "Let there be lights in the expanse of the heavens to separate the day from the night, and let them be for signs and for seasons and for days and years;

¹⁵and let them be for lights in the expanse of the heavens to give light on the earth"; and it was so.

¹⁶God made the two great lights, the greater light to govern the day, and the lesser light to govern the night; He made the stars also.

¹⁷God placed them in the expanse of the heavens to give light on the earth,

¹⁸and to govern the day and the night, and to separate the light from the darkness; and God saw that it was good.

¹⁹There was evening and there was morning, a fourth day.

²⁰Then God said, "Let the waters teem with swarms of living creatures, and let birds fly above the earth in the open expanse of the heavens."

²¹God created the great sea monsters and every living creature that moves, with which the waters swarmed after their kind, and every winged bird after its kind; and God saw that it was good.

²²God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth."

²³There was evening and there was morning, a fifth day.

²⁴Then God said, "Let the earth bring forth living creatures after their kind: cattle and creeping things and beasts of the earth after their kind"; and it was so.

²⁵God made the beasts of the earth after their kind, and the cattle after their kind, and everything that creeps on the ground after its kind; and God saw that it was good.

²⁶Then God said, "Let Us make man in Our image, according to Our likeness; and let them rule over the fish of the sea and over the birds of the sky and over the cattle and over all the earth, and over every creeping thing that creeps on the earth."

²⁷God created man in His own image, in the image of God He created him; male and female He created them.

²⁸God blessed them; and God said to them, "Be fruitful and multiply, and fill the earth, and subdue it; and rule over the fish of the sea and over the birds of the sky and over every living thing that moves on the earth."

²⁹Then God said, "Behold, I have given you every plant yielding seed that is on the surface of all the earth, and every tree which has fruit yielding seed; it shall be food for you;

³⁰and to every beast of the earth and to every bird of the sky and to every thing that moves on the earth which has life, I have given every green plant for food"; and it was so.

³¹God saw all that He had made, and behold, it was very good. And there was evening and there was morning, the sixth day.

Genesis 2

¹Thus the heavens and the earth were completed, and all their hosts.

²By the seventh day God completed His work which He had done, and He rested on the seventh day from all His work which He had done.

³Then God blessed the seventh day and sanctified it, because in it He rested from all His work which God had created and made.

⁴This is the account of the heavens and the earth when they were created, in the day that the LORD God made earth and heaven.

A Scientific Look at the Days of Creation

Let's start at the very beginning. Genesis 1:1 says "*In the beginning God created the heavens and the earth.*" Our universe is all space, all time and all matter. God couldn't have started with a more scientific statement than Genesis 1:1 (as if He didn't know!). "*In the beginning*" refers to God's creation of time. "*God created the heavens*" refers to the creation of space, "*and the earth*" refers to the creation of matter.

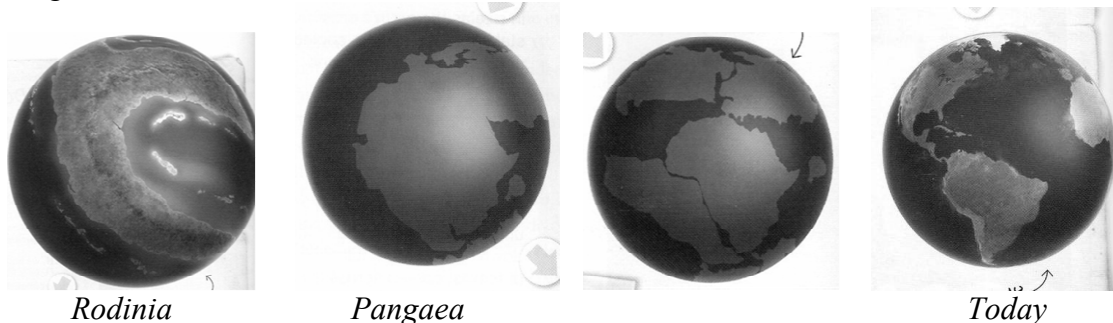
Please notice that God created the one universe as a trinity of time, space and matter. Interestingly, these 3 parts all exist in trinities: time is past, present, and future; space is width, depth, and height; and matter is a trinity also but it is too complicated for us to explore here. So God created the universe in a trinity of trinities. Now isn't that interesting! Romans 1:20 tells us, "*For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse.*"

Genesis 1:1 describes the birth of the universe as we know it. Therefore, it records the beginning of history. God observed the creation week as it happened and then had a reliable transcriber record the events, which means Creation is history.

Genesis 1:2 tells us that the earth was still in a formless and void state. The matter had not yet been energized, thus the formless and void description. The Bible says "*the Spirit of God was moving over the surface of the waters.*" We believe this is referring to when God energized His newly created system by activating atomic and gravitational forces. Atomic forces give matter its form while gravity gives stars and planets their spherical shape or "form."

God then spoke light into being and called His infant universe out of the darkness and into His marvelous light, just like He did for us (I Peter 2:9). Thus ends the exciting first day in history. On day two, God separated the waters above from the waters below. The atmosphere was separated from the oceans below.

On the third day God said, "Let the waters be gathered into one place, and let the dry land appear." Most people agree that when God gathered the waters into "one" place, the land appeared in the "other" place. **Rodinia** which is Russian for the "motherland" is the name given to this originally created supercontinent by current scientists. Catastrophically, it was divided during the Flood into the seven continents of today. Many miles of dirt, rock, and other sediments (which are solids that settle out of liquids) eroded or washed off of Rodinia as it rose from underneath the waters. Those sediments settled out in some places and eventually were glued together into sedimentary rock which we will discuss in more detail later in our study. To spruce up this new plot of ground, God made the seemingly endless beauty found in the plant kingdom: flowers, fruit trees, shrubs and herbs.



God spent days 4-6 filling the different areas that He had created on the first three days. It was like He created three types of canvases during the first half of the week and would spend the second half filling them with extraordinary things. On the first day, God had created the universe including outer space. So on the fourth day He filled it with the most spectacular light-show ever. God created all the heavenly lights: the sun, moon, planets, stars, etc. which we will be blessed to explore in more depth this year, a truly brilliant experience.

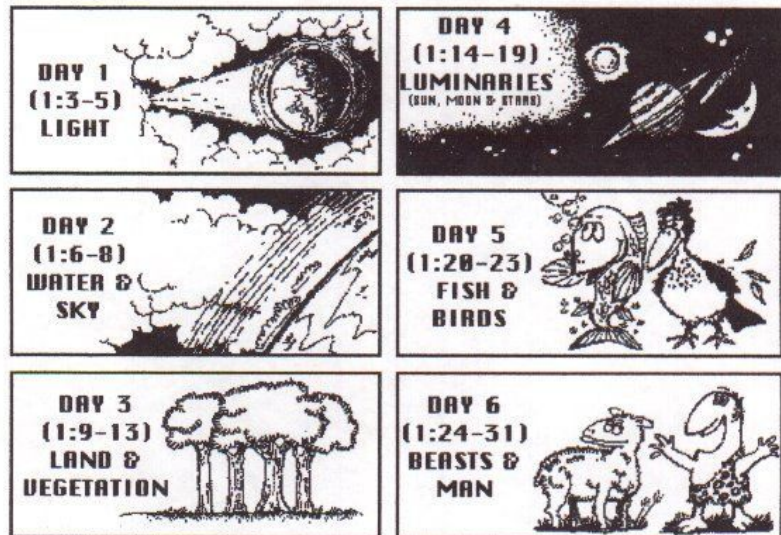
On the second day God separated the waters and made the ocean and the atmosphere. On day five He filled these "blank canvases" with more masterpieces by creating all the creatures that live in the water and all the flying creatures. This included not only the fish and birds that immediately come to mind, but also the pterosaurs, bats, plesiosaurs (like the Loch Ness monster) and leviathan.

On the third day, God made the land and plants. On the sixth day, God filled the land with all sorts of life from creepy crawlers to dinosaurs. His grand finale was the creation of man in His own image. Now that was six action-packed days!

In our first year of *The Lord God Made Them All – All Things Bright and Beautiful* we will explore those things God created on the first four days of the creation week. Although we will talk about their origins and events that happened to them in the past, we will spend more time exploring how they exist today because we can observe them in the present. In the second year our adventure *All Creatures Great and Small* and *All Things Wise and Wonderful* our exploration will include animals and mankind which were created on the 5th and 6th days of creation.

Many students wonder what light source God used on those first three days of the creation week if the sun wasn't made until the fourth day. It's a very good question. The Scripture does not give a clear answer to this dilemma but it does not leave us totally 'in the dark' either. We are told in Revelation 21 that God will restore everything someday to its original, perfect condition. We are also told that at that time, God will be our light-source. Therefore, many of us believe that God was the light-source for His creation before He spoke the sun into existence.

DAYS OF CREATION IN GENESIS ONE



Paradise was completed. Originally everything was perfect and had very long lives, sometimes growing very large. All animals and people were originally vegetarians (only ate plant foods but no meat) and there was no death of anything with the breath of life in it, which is generally animal life.

After Adam and Eve sinned, the curse of death was placed upon all creation. Scientists have observed this state of death as they see everything in the universe is running down.

What Did We Learn?

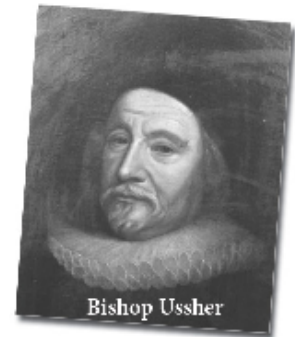
1. What "canvases" did God create on the first three days of creation?
2. What did God paint into His first canvas on the fourth day?
3. What did God paint into His second canvas on the fifth day?
4. What did God paint into His third canvas on the sixth day?
5. What is the name scientists give to the original supercontinent and what does that name mean?

The list below comes from the Awana program's Cubbies book (3 and 4 year olds). It is a very easy way to remember the basics of what God made on each creation day. I would suggest you memorize it. Even as an adult, I use it all the time!

Day One	Day and Night
Day Two	Sky and Water
Day Three	Land and Plants
Day Four	Sun, Moon, and Stars
Day Five	Fish and Birds
Day Six	Animals and Man
Day Seven	God Rested

The Age of the Earth

The Bible tells us that God created everything in 6 real days, which makes the earth around 6,000 years old. A very educated Christian man named Bishop Ussher who lived in the 1600s worked very diligently to figure out how old the creation really is. He knew when Nebuchadnezzar lived in history and used that date as a starting point to work back through the Bible to the beginning of creation. After working diligently, he came up with a creation date of 4004 BC. (If you are interested in more information on this, please refer to the appendix to read the article *The Forgotten Bishop*.)



For people to believe cells could evolve into plants and animals, they must believe it took a very long time, millions and millions of years. Most people are taught and therefore believe the earth is very old, over 5,000,000,000 years old. Some Christians have tried to fit those billions of years into their Bible in many creative ways by making the creation week a very long time, not just six days, but it is not scientifically necessary nor does it fit the clear reading of the Bible.

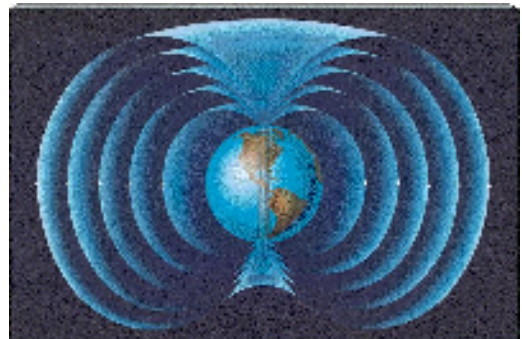
The Bible says God created in six days, with each numbered creation day having the length of an evening and a morning, no longer. An "evening and a morning" can only mean a regular day, not a long period of time.

Also Exodus 20:11, in the ten commandments, which God wrote with His own hand we learn "For in six days the LORD made the heavens and the earth, the sea and all that is in them, and rested on the seventh day; therefore the Lord blessed the Sabbath and made it holy." God created everything in creation in six real days and rested on the seventh. God could have spoken it all into being at once, couldn't He?! He is the all powerful God of the universe that created time itself and everything else but He tells us right here why He took so long. He was giving us an example of how we should work six days and rest on the seventh.

There are many scientific evidences that support the idea of a young earth. They are called geochronometers. *Geo* refers to earth, *chronometers* measure time, so geochronometers are things that we use to measure the time earth has been here. Please realize these are only as good as the assumptions we make about the past because we can only scientifically observe things in the present. The Bible gives us a definite advantage though because God never makes mistakes and He WAS there when it happened. We'll explore just a few of many geochronometers here.

Have you ever used a compass to find your way while hiking or camping? Compasses point to magnetic north because the earth has a magnetic field. The magnetic field of the earth protects us from some high energy rays that the sun makes that would otherwise kill us. The earth's magnetic field has been measured since 1835 and it is steadily getting weaker. Scientists have calculated that if it has always decayed or weakened at the same rate that it is now, then the earth must be less than 20,000 years old.

Another example is that the earth is very hot inside and it is passing through very cold outer space. Now think, if you put a hot potato in your freezer today, would it be a hot potato tomorrow? Of course not; the potato would lose its heat to the cold freezer surrounding



it. The same is true of the earth. Even with all the heat energy it receives from the sun, the earth is losing its heat at such a rate that it should have been frozen all the way to the center over 100 times by now and yet it is still very hot inside the earth (over 7,000°F).

Working almost continuously in their assault, wind and water erode (or wear away) billions of tons of rock each year. These sediments (small pieces of rock and dirt that has been carried off) eventually collect as mud on hard lava-formed rock of the ocean floor. Slowly, the sea floors slide beneath the continents in places taking some of this sedimentary mud with it. Even with that in mind, at the current rate at which the sediments are being deposited which is 24 billion tons per year (25 billion tons minus the 1 ton that is lost when it slides under the continent). Then all the mud on the sea floors worldwide today would accumulate in less than 12 million years as non-Bible believing scientist would calculate it. They assume there was never any catastrophe in the past that might have added a lot of sediments more rapidly than it collects today. Can you think of what happened in the past that might account for that? That's right, the Genesis Flood that Noah survived. We'll explore the Flood and its consequences soon but that would bring our ocean floor mud amount of less than 1200 feet thick to being able to be deposited within a short time about 5,000 years ago.

We will explore many more evidences for a relatively young creation as we go through our adventure. I say relatively young because to me, 6,000 years old is really old but compared to the five billion years that the Evolution Explanation requires, 6,000 years is nothing. To give you an idea of the difference, if you lay a bible down on the ground and it represents 10,000 years old, then the stack of Bibles to represent 5 billion years would be over 15 miles high! That's a big difference. As this can be very important information, make a special section in your notebook that is titled "Young Earth Evidence". If you just can't wait and are curious to learn more about this fascinating subject, there is an excellent article written by Dr. Russell Humphreys in the appendix.

What Did We Learn?

6. Who is the Christian scholar who came up with the creation date of 4004BC?
 7. Why is a very old earth and universe absolutely necessary to people who don't accept the Biblical creation account?
 8. How old do secular (not Christian) scientists believe the earth to be?
 9. List at least two Bible references that clearly teach the creation days were real days rather than long periods of time.
 10. What are geochronometers?
 11. Briefly describe at least one piece of scientific evidence that the earth is relatively young.
-

The Seven C's of History

The seven C's of history is a framework into which all history and future events came be placed. This helps us have a Providential view of history which means a view of history which focuses on God's purposes rather than man's. We will discuss these further in class but the Cs are as follows:

Creation, Corruption, Catastrophe, Confusion, Christ, Cross, Consummation.

As you already have surmised, the creation event is what we have been focused on so far. The study of any of the natural sciences and exploration of God's awesome power and design leads us back to the act of creation and glorifying the Creator!

Sadly, the second C reminds us of Adam and Eve's sin at which time all creation was put under the curse of death. That is when corruption entered God's previously perfect creation and this is why we see death, suffering, and decay in the universe today. In the midst of the curse and corruption, our gracious Lord promised to provide our Savior not leaving us without hope.

Although it happened thousands of years ago and many people act like it's just a fairy tale or myth, the Flood through which Noah was saved by obeying God's instructions was a global catastrophe. We will have an exciting time studying all the changes and fossil evidence left behind from this event from which our world is still trying to recover.

I bet many of you guessed right away to what event the fourth C is referring, the tower of Babel! Remember that is when the languages were confused because mankind once again was rebelling against God. This event is pivotal in the development of the different so called "races" that we see within mankind today and opens the door to many very interesting areas of study.

The fifth C is my favorite because it stands for Christ. Our Jesus is the focal point of history; everything before Him was pointing to His coming and everything after Him is affected by who He is and what He is still doing and will do, Praise the Lord!

The sixth C is where our hope lies to be free from the corruption C because Jesus beat the enemy at the cross. The sinless, perfect God-man took my place and our place on that cruel execution device so that He could buy us out of slavery to sin and make us His own dear children. It makes me think of the words to an old hymn, "Amazing love, how can it be, that Thou my God would die for me?"

The seventh C is consummation which is also really good news. God promised to put all things back into their original perfect condition some day. I can't wait!!! Just imagine a world without death, suffering, war, disease, pain, separation, etc. We will finally see God's creation how it was meant to be. I find it absolutely amazing now so I can't wait to see what our great God has in store for us in the future. We can all bank on God's promises.

What Did We Learn?

12. List the seven C's in your notebook.

Read and answer questions from Lessons 1 and 3 in *Our Planet Earth*. Remember, you do not have to read the beginners section nor do you have to read or do the lab activities which are in blue boxes with a magnifying glass as an icon. Just read the rest of the text and answer the "What Did We Learn" questions. The "Taking it Further" questions are optional for the older students.
