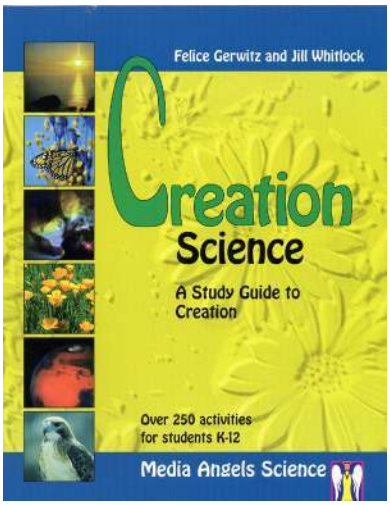

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Review:

This unit study is packed with activities and ideas for all subjects. At first, I was a bit overwhelmed by all of the material that comes with this study but after reading through it I was very happy with the purchase. You can use the lesson plans that are provided for each level or you can create your own with the provided lesson planning sheets. I have been searching through every unit study company listed on homeschool sites and review boards and I have to say that Media Angels produce units that have lots of "meat" and the activities are very easy to do and make learning fun. I plan on purchasing more of these ebooks.

Thanks, **Penny from Louisiana**

8 books chosen by Cathy Duffy's 100 Top Picks for Homeschooling Curriculum (including Teaching Science and Having Fun)

Creation Science: A Study Guide to Creation!
Media Angels®, Inc.
Ft. Myers, Florida 33912
www.MediaAngels.com
©1994 by Felice Gerwitz and Jill Whitlock
Revised 1997, 2003.
ISBN # 0-9700385-0-X

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Scripture quotations are taken from:
New International Version Bible, Grand Rapids: Zondervan Bible Publishers, 1983.

This book is dedicated to our families, and to our
Heavenly Father whose intervention in our lives has made this book possible.

We would like to thank all the people who prayed and encouraged us during the writing of this book—especially our families. We would especially like to thank Chris Thomas and Paula Holmes, our past editors, and Mary Jo Tate, our current editor, for their time and devotion to making this book a priority. Another special thank-you goes to Frank Sherwin from the Institute of Creation Research for taking the time over the years to read and edit this book. You have truly been a God-send, and we couldn't have done it without you.

Special acknowledgment from Jill: I especially want to thank Dennis Petersen, whose "Unlocking the Mysteries of Creation Seminar" I attended in Coeur d'Alene, Idaho, many years ago when I first became a Christian. He inspired my interest in Creation Science.

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INTRODUCTION

Any comprehensive study of science is going to come up against the "Creation versus evolution" debate. Some maintain that evolution, the idea that life developed randomly from non-living substance, is a purely scientific theory and that Creation is purely a religious viewpoint. The aim of this study guide is to present a scientific approach to Creation as we examine the physical universe and how it came into being.

Throughout the United States and the world, more and more legitimate scientists are considering the possibility that the complexity, organization, and perfection seen in the universe and on the Earth could only have been the result of special Creation by a Divine Designer. This scientist once believed that everything taught in school pertaining to the theory of evolution was pure scientific fact. After careful analytical study of the scientific evidence, I have come to the conclusion that the physical evidence does not support the evolution model, but rather the Creation model.

Scientists will tell you that they are in search of the truth. This is usually the case unless the truth happens to be in opposition to what the scientist holds as firm belief. Belief in the theory of evolution requires as much or more "faith" than does belief or "faith" in Creation. **True science is *observable*, *testable,* and *repeatable***. Neither evolution nor Creation can be duplicated in a laboratory, and therefore both are belief systems. I am presenting a scientific argument which demonstrates why the Creation model better fits the observable universe. Christians should never be afraid of science, because science will ultimately prove that the Bible is the true and accurate account of how this incredible world in which we live came into being. I hope your faith in Creation will be strengthened as you pursue the scientific evidence abundantly provided by the Creator of the universe.

Jill Whitlock

Let's Do a Creation Science Unit!

How much do you know about Creation? Like most of us, you are probably familiar with the Genesis account of the six days of Creation and Noah's Ark. This unit is designed to take you further than you ever thought possible! We have thoroughly researched the topic. (Jill has studied Creation science since 1984!) We have tried to make a technical subject easy to understand and teach.

To make this study useful to teachers of different grades, it has been divided into three levels. The divisions are **kindergarten through grade three,** grades **four through eight**, and grades **nine through twelve**. Another feature is subject divisions, which follow the study outlines to give you some ideas on how to incorporate **reading, vocabulary, spelling, grammar, language arts, math reinforcements, geography, history, science projects, activities, experiments, art,** and **music** into your unit studies. We have included ideas that we believe to be the most helpful. Some of the games and activities are old favorites which have been revised a little to fit the occasion.

A **resource guide** is provided to aid you in obtaining materials; many of the books listed are readily available. Unfortunately most libraries do not carry a wide selection of **Creation science books**, so we list various sources where these materials may be purchased. There is also a guide to Creation science **videos** and **audiotapes.** We have included a **materials list and field trip guide,** as well as pages you may copy: **science experiment sheets** and **materials chart.** We have supplied **Internet** information.

When your child is learning a new scientific concept, make sure you have him re-tell in his own words what he has just learned. For example, if you are teaching about density, you may want to do an experiment which illustrates the concept: float a "toy ark" in water and drop a shell in beside it. Ask, "Which one floats and which one sinks?" A young child may answer, "The boat floats and the shell sinks." An **older child** should be required to explain why: "The shell is denser than the water it displaces, and the ark floats because the weight of the ark is less than the weight of the fluid it displaces." This is a quick way to check to make sure your child is following the concept and not getting sidetracked by the fun!

Creation science is a challenging area to study. Please refer to the detailed **Teaching Outline** in the front of the book, beginning on page 9. This outline corresponds to those in each of the three grade-level divisions, although not precisely. (We have obviously left out some of the complicated points and discussions in the outlines for younger students; therefore, the outlines are numbered differently.) Look for the topic headings when looking for a further explanation in the Teaching Outline. You will easily be able to spot the sections that Felice Gerwitz, educator, and Jill Whitlock, scientist, have written! (*I tried to keep her to the basics, but alas, it was not possible in some areas....*)

With some preparation, your children will soon be sharing with others all that they are learning. They will be able to recognize the difference between beliefs held by evolutionists and those held by Creationists. It is our hope that this unit encourages you and your children to further study the subject and discover the exciting truth of Creation! Are you ready? Let's start our adventure...

Felice Gerwitz

How To Prepare a Unit Study

What is a unit study, and what are the advantages of teaching in such a manner? This is an often-asked question which we will attempt to answer. For additional information, one excellent book that we recommend is Valerie Bendt's *How to Create Your Own Unit Study,* which gives an in-depth explanation of how to plan a unit.

What is a unit study?

A unit study is taking one topic, in this case Creation science, and interrelating all the other subjects into a unified teaching approach. In other words, while studying the topic of Creation science, the children will *read* Creation science books and research materials, *write* assignments relating to what they've read, *spell* words they may have had difficulty reading or writing, *learn* vocabulary words dealing with Creation science, do *math problems* based on scientific principles, read and research *historical periods* relating to Creation and time periods in which noteworthy evolutionists or Creation scientists lived, study *geographical locations* of scientific discoveries and Biblical events (e.g., where Noah's Ark now rests), create *art works* dealing with the flood (such as drawing the animals that went into Noah's Ark), and for *music* play instruments that make sounds similar to those in nature. In other words, all the subjects will relate to the main topic. (The authors suggest that you supplement grammar, phonics, and math with other programs, where age appropriate.)

Why teach a unit study?

The unit study approach emphasizes that reading many books related to a topic, rather than isolated textbooks, encourages discussion and research on the part of the children, therefore making learning more natural and retention of information much more successful. This is ideal for parents with children at different grade levels. It makes teaching much easier. The main area of interest can be taught in a group; then children can work on age-appropriate activities individually. It keeps the family together most of the time, rather than separating children to do their own individual work. It also encourages older siblings to assist younger ones and thereby learn by teaching.

Traditionally, subjects are taught in an isolated manner in textbooks or workbooks with fill-in-the-blank format. Very few, if any, of the subjects are interrelated, and all of the learning is done in an individual manner. Unit studies relate all academic subjects under one main idea and can easily work with one child or a group of children.

Does a unit study cover all of the topics I need to teach in every grade?

Yes and no! It depends on the grade level of your child and what your goals are for your home school. Many children know all they need to know for kindergarten by the time they are preschoolers, leaving the kindergarten year free to implement unit studies on many different topics. Often, as the child progresses, because of all the reading, research, projects, and experimentation that he does, his learning will surpass what is generally considered "normal" for his grade level. Still, if you are concerned about standardized testing, the authors recommend you use these study guides as supplements to your core curriculum. However, in many cases, when homeschool students who have been taught with the unit study approach take a standardized test, they score in the 90+ percentile.

How long does it take to complete a unit study?

Unit studies may be completed in several weeks or studied for an entire year depending on the depth of your coverage of a topic and the varying abilities of your children. For example, we have used our Creation Anatomy study guide in our family as a unit study covering three months. We will use it again as a core subject for high school credit for Anatomy when the time comes. With units you are not bound to a routine of one hour for each subject. The relationships between the topics are natural, and you will often find many subjects are covered without much effort. You will also be free to spend more time on a particularly interesting topic as you see your children's interest level rise in that area. These study guides are meant to be supplemental to your core curriculum, and you can tailor them to meet your family's needs.

How do I get started with planning?

We have done much of the planning for you with our ready-to-go lesson plans (see below). If you are interested in planning your own lessons, the best place to start is with a calendar, paper, pencil, and the **Teaching Outline** in this study guide. Read through the outline and choose the points you wish to cover. You may use the topics provided in each of the three grade levels, or you may utilize them as starters in creating your own outline. The **grade level teaching outlines** are geared for each of three levels: K-3, 4-8, and 9-12. They are not as extensive as the Teaching Outline in the front of the book; therefore, the numerical labels do not correspond exactly. Use the **Teaching Outline** to familiarize yourself with the topic; it is designed specifically to be read by the parent as preparation for teaching the topic. It will give you the necessary information and background to teach the unit. We encourage you to read portions aloud to younger children and have older children read them alone or with you.

As you write your outline or points you want to cover, leave room for additions (you may later run across a book or topic that you want to include). Decide how long you want your unit to take. What months are you considering? Is this time before a major holiday? If so, you may want to do a shorter unit. Is it the beginning of school, summer, or other longer period of time? If so, you may wish to do a more complicated unit or spend more time digging deeper into the topic you choose. Decide what subjects you want to incorporate and what days you will do each. For example you can work on reading, writing, grammar, and math every day, but perhaps science experimentation and history will only be done three out of five days. You may prefer a Mon.-Wed.-Fri./ Tues.-Thurs. type of routine, or if you take Fridays off, your schedule might be Mon.-Wed./Tues.-Thurs. (See sample schedules on page 6.) Remember, it's up to you.

Approximately 6-8 weeks is a good time span for the study of Creation science. We feel this is an excellent preparation to counter secular materials, where it is almost impossible to avoid the evolutionary viewpoint.

How do I use the lesson plans provided?

Included are sample lessons for a six-week study for each grade. You will find these after each outline. Here you will find specific Bible verses to read, as well as science experiments or activities, language arts and spelling, history, music, and art activities mapped out daily for you. You will notice that some areas are left blank for you to include books of your choice. We understand that *not every book* we specify will be available to you. You may not find *any* of the books you are looking for. Do know that the teaching outline gives you the major points you should understand after the end of the lesson. If you do not like the activity we have specified,

feel free to omit it and substitute your own! We have supplied a blank lesson plan sheet for you to photocopy.

Go through the age-appropriate outlines and look for the activities and assignments suggested in the lesson plans. If you have a mix of older and younger children, try to find a middle ground as a starting place. Check off the activities that interest you in each subject area. Decide which supplemental books you will need, and plan on obtaining them. Interlibrary loans are able to obtain books from private libraries. Did you know that in most cities you can order library books online and have them ready to be picked up at the checkout desk? What a time saver, especially if you have younger children.

This study contains a list of a greater number of books than necessary so that if you can't obtain one particular book, you may be able to find another. Use the topics as your guide.

This is too overwhelming! Will I be able to implement it all?

Don't become discouraged or feel overwhelmed. It takes one or two unit studies to become comfortable and feel like an "old pro." One way to fit everything in is a day-by-day approach. You may want to do all of the reading and research on day one, geography or history on day two, math and language arts (vocabulary, spelling, and grammar) on day three, science experiments on day four, art and music on day five. Day five can also be used as the catch-up day to finish any work not completed on the previous four days. I highly recommend a "game" day on Friday for grades six and under. This entitles your child to bring out educational games to play on this day.

Decide which books you want your children to read on their own. Many times older siblings can be a great help in teaching the younger ones and will have lots of great ideas for projects. Remember, unit studies have the goal of tying in as many subjects as possible, so you don't need to supplement with a spelling workbook or vocabulary workbook unless your child has a definite need that can't be met any other way. Consider that it might be overloading the kids with seat work and creating frustration when they can't get it all done. (We speak from experience!)

How do I test to find out if my children have learned what I am teaching with the unit approach?

We have found that working closely with our children tells us all we need to know about what they know and don't know. By reading materials orally and then verbally questioning them, we know what needs review and what doesn't. They do many hands-on activities that reinforce previously read materials. For example, in this book there is a discussion of evolutionary principles. One of the points made is how evolution violates the second law of thermodynamics. That in itself sounds very dry and scholarly, yet a follow-up activity, the "Entropy" experiment, presented after the discussion, is a very visual way to reinforce what they have learned. If the children can explain it to you, then you know they understand the concept. After reading all this, if you feel the need to create tests to find out what they know, feel free to do so! You could easily generate oral tests for the little ones, and essay questions for the older ones. One of the great things about homeschooling is the freedom to teach as you wish.

What about co-oping?

Co-oping is teaching a unit study with another family (or several families) and taking time—usually once a week—to work together on projects, experiments, or activities for the entire day. Each family focuses on the unit topic at home during the week by reading books or completing additional projects the co-op will not be covering. The co-op is a way of reinforcing the subjects taught at home with hands-on and group activities. This unit lends itself well to co-ops. There are many experiments that would be fun to do as a group. Still, they can be done just as easily with a single family. A great resource is *Co-Oping for Cowards* by Pat Wesolowski of DP& Kids Productions. Pat's e-mail address is bisb@juno.com, and her website is www.co-oping4cowards.com.

Why teach using a science approach rather than literature or history?

Each of the approaches has its pros and cons. We prefer science because it focuses on experimenting, which encourages creative thinking and exploration on a greater scale than either literature or history. Truly, it is a matter of preference. We have done literature and history as well as science units with our children. Of course we feel that the knowledge of Creation is important to counteract what the secular media is teaching.

We pray that this will help you with unit studies. We believe that learning should be fun for you and your children, while still being educational. When it's fun, hands-on, and messy (especially messy!), the learning experience will stay with them. Try not to get bogged down and become a slave to a schedule (recipe for disaster!). While Jill was living in Washington state, a friend of hers was doing a unit on Washington state history. They traveled all over the state visiting historical sites. After a boat ride to see the orcas migrating, they were so intrigued that they visited the Sea-aquarium and beaches, etc. Soon they realized they were no longer doing a unit on history but one on marine biology. That's the way unit studies should flow!

Suggested Schedule

For those of you who would like help planning a schedule for this study, I have drawn up some thumbnail sketches to use as a basis for planning. Please use these loosely and feel free to add or delete anything you wish. Notice that I have not included times. This is intentional, as there is no way I can know what will work for you and your family. The next page contains a blank weekly lesson plan sheet. Before each grade level you will find weekly lesson plans if you wish for a more detailed chart.

Schedule A

Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer
Suggested reading	Language Arts activities	Suggested reading	Language Arts activities	Suggested reading
Vocabulary, Spelling, and Grammar	Math reinforcements	Vocabulary, Spelling, and Grammar	Math reinforcements	Vocabulary, Spelling, and Grammar
Science activities	Geography/History	Science activities	Geography/History	Science activities
Art	Music	Art	Music	Art

Schedule B

Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer
Suggested reading	Math reinforcements	Suggested reading	Math reinforcements	Suggested reading
Language Arts activities	Vocabulary, Spelling, and Grammar	Language Arts activities	Vocabulary, Spelling, and Grammar	Language Arts activities
Geography/History	Science activities	Geography/History	Science activities	Geography/History
Finish activities	Music	Finish activities	Art	Finish activities

Schedule C

Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer	Bible/Prayer
Math textbook	Math textbook	Math textbook	Math textbook	Math textbook
Reading/Phonics program	Reading/Phonics program	Reading/Phonics program	Reading/Phonics program	Reading/Phonics program
Suggested reading	Math reinforcements	Suggested reading	Math reinforcements	Suggested reading
Language Arts activities	Vocabulary, Spelling, and Grammar	Language Arts activities	Vocabulary, Spelling, and Grammar	Language Arts activities
Science activities	Geography/History	Science activities	Geography/History	Science activities
Music	Art	Music	Art	Music

Lesson Plans

Subject	Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Religion Studies					
Creation Teaching Outline					
Reading Selection					
Language Arts					
Math Reinforcement					
Science Activities and Experiments					
Geography/History Ideas					
Art/Music					

CR= Creation Resource TS= Teacher Selection

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Teaching Outline

Around the world today there are many accounts of how our universe came into being. Here in the United States, two diametrically opposed beliefs are very strongly held and argued by both sides. One is said to be scientific, the other purely religious. Creation scientists look at the universe as having been specially created by God. This view rules out any possibility of evolution occurring. Neo-Darwinian scientists look at the universe as having been formed slowly over millions and billions of years. This view rules out any possibility of Special Creation by an Intelligent Designer.

These two diametrically opposing views cannot be resolved, so the debate continues. However, a belief in evolution actually requires more faith than a belief in specific creation by a divine Creator. Evolution is really more myth and hypothesis. Many points offered in support of evolution have been disproved, as we will show you. More and more scientists are abandoning the theory of evolution for a belief in Intelligent Design and acknowledging that a Creator was necessary. Many of these scientists started out as staunch evolutionists, but with new information and discoveries, they have changed their views. A few of these scientists are: Dr. Paul A. Nelson, a philosopher of Biology; Dr. Dean H. Kenyon, professor of biology at the University of San Francisco; Dr. Michael J. Behe, biochemist at Lehigh University; Dr. Stephen C. Myer, a former evolutionary biochemist at the Discover Institute; Dr. William Dembski, a geneticist from Australia; Ed Macosko, a molecular biologist from the University of California Berkeley; Scott Minnisch, a molecular biologist from the University of Idaho. Geologists, physicists, and scientists already working in the Creation science field include Dr. Henry Morris, Dr. John Morris, Dr. Steve Austin, Dr. Russell Humphreys, Dr. Carl Wieland, Dr. John Baumgardner, Dr. Andrew Snelling, Dr. Larry Vardiman, and many others.

I. Days of Creation

A Day Is a Day — There is much controversy over the meaning of time in the days of the Creation week. Some theologians propose the Day-Age Theory, in which each day represents a thousand years. Others, such as proponents of the Gap Theory, find ways to put long ages into the Genesis account. Most Creation scientists believe the days of Creation were twenty-four-hour time periods. The words used in the text of Genesis clearly indicate that this is so. The definition of the Hebrew word y*om,* which is used in Genesis 1*,* is "a regular day." The use of the terms "evening and morning" also designates one day. Whenever the word *yom* is used with an ordinal number (1, 2, 3 . . .), it means a twenty-four-hour day. This is a frame of reference that would have been familiar to Moses and his people when he was writing this book for the Hebrews. This same word, *yom*, is used 359 times outside of the book of Genesis to mean a twenty-four-hour day. To the Hebrews, there would have been no doubt as to the meaning of this word: a literal, twenty-four-hour day. God Himself, when writing the Ten Commandments, wrote in stone, "For in six days the Lord made heaven and earth, the sea, and all that is in them, and rested the seventh day" (Ex. 20:11).

The Space-Time-Matter Continuum — "In the beginning God created the heavens and the earth" (Gen 1:1). In this very first verse of the Bible, God establishes the *space-time-matter continuum.* "In the beginning" starts time. God is eternal, but we can only try to understand Him in the limited terms of what we define as time such as minute, day, hour, etc. "The

heavens" is the space. That includes our atmosphere, the stars we see in the universe, and the dwelling places of God and the angels. And "the earth" is the matter. Matter and light (energy) are related according to Einstein's theory of relativity where $E=mc^2$ (Energy = mass times the speed of light squared). Here the energy of a substance is related to its mass multiplied by the square of light speed. Nehemiah 9:6 states, "You made the heavens, even the highest heavens, and all their host, the earth and all that is on it, the seas and all that is in them." This leaves nothing out of the days of Creation. God created everything that has ever been. That leaves no room for the Gap theory, the Day-Age theory or any other compromise position that theologians have come up with to try to make the Bible fit into secular science. (See False Concepts page 13.)

Day One: Light and Dark — "God is light" (1 John 1:5). On the first day of Creation, God separated light from dark and day from night. Gen. 1:5 says, "And there was evening and there was morning—the first day." The phrase "there was evening and there was morning" indicates a normal day. Because a day on Earth is measured by one complete rotation, we understand the earth began to rotate. However, there was no sun yet, as it was created on the fourth day. The light came from the presence of God. The Bible repeatedly refers to God and Jesus as light—physical and spiritual light. As Christians we believe Jesus to be totally divine and totally human, one being with two inseparable natures. Science does not have a precise determination of what light is, but it has revealed that light has two natures. Light functions as a wave and as particles. These two functions seem to be contradictory, but both are very real characteristics of light. So too is the character of Jesus, The Light of the World. He was born of a woman and is totally human, and He is the Son of God and is totally divine. (I personally believe that one of the greatest miracles God ever performed was to place His infinite glory in the body of a small baby.)

Day Two: Waters Above and Waters Below — There is currently much controversy over the long-accepted theory of a vapor canopy surrounding the pre-Flood earth protecting it from harmful radiation. A canopy of water vapor at the edge of the stratosphere would also have provided an increase of atmospheric pressure to at least two atmospheres, which would have been beneficial for exceptional growth and rapid healing. A vapor canopy would have caused a greenhouse effect on the planet resulting in a more tropical climate over the entire globe. Some scientists, however, have calculated that such a vapor canopy would have increased the greenhouse effect so much that life would not be possible on earth. Dr. Larry Vardiman, a scientist with the Institute for Creation Research, presented a paper at the International Conference on Creationism in Pittsburgh in August of 2003 entitled, "Temperature Profiles For An Optimized Water Vapor Canopy." In his paper, Dr. Vardiman uses calculations of temperatures beneath a water vapor canopy, varying certain parameters, to show how the greenhouse effect could have been minimized (Vardiman 2003). Also, recent experiments at Texas A & M University have indicated that the long-necked dinosaurs—such as the brachiosaurus, diplodocus, and the apatosaurus—could not have been able to breathe unless there were at least two atmospheres of pressure due to the time it would take for oxygen to flow into their very long necks. Breathing would have required the assistance of double atmospheric pressure.

Waters Above — In the pre-Flood environment, the earth could possibly have been surrounded by a canopy of water vapor. "So God made the expanse and separated the water under the expanse from the water above it" (Gen. 1:7). Picture a bubble of water surrounding the earth causing a greenhouse effect and temperate climate world-wide. (See Section III—Flood Geology and Noah's Ark.) This is not such a strange concept because our neighbor, Venus, is

Creation Science Outline
K-3

Outline:

I. Days of Creation
- A. Day One — Light and dark
- B. Day Two — Waters above and waters below
  1. Water vapor canopy
  2. Shielded harmful sun rays—longer life span (see timeline chart on page vi)
  3. Warm climate worldwide — no storms, no rain
  4. Fountains of the great deep
- C. Day Three — Dry land and plants
  1. Seas gathered in one place
  2. Land in one place with plants
- D. Day Four — Sun, moon, and stars
  1. Light before sun
  2. Stars for signs and to mark seasons, days, years
- E. Day Five — Fish and birds
- F. Day Six — All other animals and Man

II. Flood Geology and Noah's Ark
- A. Noah's Ark designed by God
- B. Water for the Flood came from the fountains of the great deep
- C. Mountains and other geological formations were formed during the Flood or soon after
  1. Tibetan Plateau
  2. Grand Canyon formed from a natural breached dam
  3. Volcanoes
- D. Earth's axis is tilted
  1. Now we have seasons
  2. Polar ice caps form
- E. Evidence for a worldwide Flood
  1. Fossils can only be preserved by rapid burial
  2. Fossils that go through many layers
  3. Earth is mostly covered with water

III. Young Earth Theory
- A. False age dating
- B. Not enough salt in the oceans
- C. Evidence from Grand Canyon and Mt. St. Helens

IV. Darwin's Theory Is False
- A. Fossils record supports separate classification of kinds
- B. No transitional creatures (plants or animals) are seen
- C. Mutations are harmful or neutral; very few are beneficial
- D. Animals always reproduce their own kind (i.e. dogs-dog; fish-fish; etc.)

Lesson Plans

Week 1 — Days of Creation

K-3

Subject Date:	Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Religion Studies	Gen. 1:1-5	TS	Gen. 1:6-8	TS	TS
Creation Teaching Outline	I. A Creation Day One		I. B Day Two		
Reading Selection	Light and dark	TS	Waters above and waters below	TS	TS
Language Arts	Assign five words from list	Begin creating ABC book	Play card game with words	Begin nature diary	Tell about nature walk or write observations
Math Reinforcement		Calendar Skills Count days of Creation	Make applesauce muffins		Count legs of insects, etc.
Science Activities and Experiments Light & Dark Water	Big Bang Experiment	Experiments from light and dark	Make vapor canopy		Go on nature walk and observe God's creation
Geography/History World Map or Globe	Map Skills: identify continents		Hypothesize where the Garden of Eden might be located; find on map		Review continents; learn oceans
Art/Music		Use clip art or drawings for ABC book	Make musical instruments	Use various musical instruments	

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Vocabulary/Spelling/Grammar Ideas
K-3

† Use the vocabulary words as spelling words for older children. You may assign five or more words per week. Add to this list as the need arises and you find words that you would like your children to learn to spell or define. For younger children, concentrate on having them become familiar with the vocabulary words. Here are some activities and games to incorporate the vocabulary/spelling words into your unit study.

† Have children use the words in sentences to show they know the spelling and meaning. Younger children can use the words in sentences or stories. Have them read the sentences into a tape recorder or dictate them to an adult or older child, who can then write them on large tablets of paper. Have the children "read" back their sentences.

† Have young children (K) pick out the alphabet letters they are studying. Rewrite the vocabulary words in large bold print on an erasable surface or on paper. Have them circle the letters they are learning (all the A's, B's, and C's, etc.).

† Choose one or two of the children's "best" sentences and have them recopy them using their neatest handwriting. (Give them a model to copy if they are just learning to print or write.)

† Use the sentences the children have written to label the parts of speech. Use colored pencils or markers for this activity. Color and code each part of speech as follows:

Underline the nouns once in red.
Underline the verbs twice in blue.
Draw a squiggly line under the adjectives.
Draw a purple box around the prepositions.
(Continue this pattern with other parts of speech you are studying.)

† Make vocabulary flash cards. A parent or student may create these cards. One side contains the word and the other the definition. Use these cards to practice. Once the vocabulary has been learned, you may play various games with the cards. You can play against your child. If he successfully defines a word, he keeps the card; if he doesn't, you get the card. Play go fish: place a paper clip on each card, then spread them on the floor. Using a strong magnet, fish for the cards. If the definition is facing upward the word must be recited, or vice-versa.

† Use the vocabulary words for younger children to make picture books. The children can cut pictures out of magazines or draw pictures to illustrate the words. Place the words in alphabetical order.

† Have the children take the largest words and find small words within them. Have them list the words in alphabetical order.

Language Arts
K-3

† These suggestions may help you incorporate language arts into your unit study. Remember to use these ideas as a jumping-off point. Many times the specific suggestions may not appeal to you but will instead give you a better idea! Often parents e-mail me with comments or suggestions—some of which are incorporated into this book.

† With young children language arts should include verbal expression such as telling back a story using their own words (narration). Children also love to tell stories about events, places, things or people they've met. If they cannot write, have them tell the story to you. Simply write down or type the stories, correcting only enough to make the sentences readable. They may illustrate the story using clip art or their own drawings. With a little practice, many children will take pleasure from this activity.

† When God created during the Creation week, He said certain aspects were good. We can see the goodness of God's Creation even today. To appreciate it, go on a nature hike and really notice the detail of little things. Use a magnifying glass for this activity. Look at flower petals, blades of grass, the bark of a tree, etc. Describe what you see, and keep a nature journal. Do this same activity several times during one week. Do you notice any changes?

† Write a poem about Creation. Try to keep the poem to seven lines, each one dealing with one of the days of Creation. You may use a specific poetry technique.

† Read Genesis 1:14-19 to the children, then make up a fun rhyme or poem such as the following using hand motions to illustrate the story: The sun shines in the sky all day.…It never asks anything of us….Even if we can't visit the sun…The sun shines its light on us.

† Discuss the word "creation" and explain that it means to make something (in God's case to make something from nothing!). Explain that painting a picture or making up a story is creating. Then proceed to "create."

† God created light, and there are also man-made versions of light. List these on a sheet of paper; see how many you can come up with. Variation: Give the children an old magazine or catalog and have them cut out pictures of things that give light.

† On the fourth day God made the sun. Write a haiku (a type of poetry) about the sun. Give the first line five syllables, second line seven syllables, and third line five syllables.

† Read your favorite book about Noah's Ark or read Genesis 6-8 in a children's Bible. Have your children pretend they are on Noah's Ark. What would they say or do? How would they feel in an ark with all those animals? Have them draw a picture of themselves in the Ark and write down their comments. Read the book again including their comments.

Math Reinforcements
K-3

† Count the days of Creation. How many hours are in each day? Does this include night? How many minutes are in one hour? How many seconds? Make a clock. Using poster board, cut hands for the clock out of bright colors. Use different colors for minute and second hands and fasten with a clasp in the center. Learn how to tell time.

† "Count" Noah's animals. Draw animals or use toy ones. Learn to count by 2's, 3's, 4's, etc. Count from 0 to 100 by 2's.

† Divide the animals into groups of two, three, four, etc. Show the relation of multiplication to sets. Have them count different sets. Is it easier to add or multiply? Try adding ten 2's together. Now try multiplying 10 x 2. Which is easier?

† Use the animals or tokens (make your own or use toy cars, blocks, etc.) for addition and subtraction.

† Go on a nature walk and look for insects that have legs. Count their legs, and keep a chart of the insects according to the number of legs they have. Try to find spiders, grasshoppers, and a centipede!

† Study an ant hill. (Be careful—ants bite!) Count the number of ants you can see in five minutes. How many ants do you think are in the ant hill? Estimate.

† Talk about the trees in the Garden of Eden. Take an apple and demonstrate fractions. Cut it in half, fourths, eighths, etc. Use this concept with other fruit. Eat the fruit!

† Make applesauce muffins or another recipe using apples. Note the different measurements used. Have children compare the fractions of solids with liquid fractions. Baking is a great way to teach children about measurements and fractions.

† Make applesauce muffins without any measuring devices. Teach fractions and the importance of accurate measuring.

† Thinking of easy solutions to discover the answers to math problems can be fun. Look for math shortcuts. For example, one plus any number is the next number in the series. Two plus any number, is two more. Any number between 1 and 9 added to 9 is that number less 1, and 1 added in the tens column before it. For example 9 + 8= ?. Take the 8, subtract 1 (that would be 7) and add a 1 in the tens column. The answer is 17. The problem 8 + 7 would be 7 less 2 is 5, with a 1 in the tens column, or 15. This takes a bit of practice, but children quickly catch on. Doubles can be easy to remember for little children after a bit of practice. That leaves very few of the middle addition facts, the 3's— 4's— 5's—6's to memorize!

Science Activities and Experiments
K-3

Science activities and experiments are lots of fun! Usually, it is best to tie in experiments with a specific topic. In this case, however, Creation encompasses everything, so it will be difficult to concentrate on experiments that tie in with one specific concept. It will therefore be important to continually discuss what you are learning! You can plan your science experiments using the six days of Creation and doing a science activity or experiment that fits in with what God created on each day. (See the Teaching Outline.) Using the scientific method makes the concept easier to understand. The **scientific method** is asking a question and finding the solution. Once you ask the question, make sure the children give you their hypothesis (or "guess" for younger children). This is what they think will happen. If they have no idea, read or observe to further research the question. The older children can write their experiment using the science experiment sheets found in the copy section of this book. The younger children can draw their answers. **Always use caution when doing any science activities or experiments! Parental supervision is a must!**

You may wish to set up experiments under the headings of the Creation week. To do, this plan activities and experiments for Light and Dark; Waters Above and Waters Below; Dry Land and Plants; Sun, Moon, and Stars; Birds and Fish; Animals and Man.

Light and Dark

† Demonstrate the three states of matter: solid, liquid, and gas. Use water: freeze it (solid), pour it (liquid), and boil it until there is steam (gas). Have the children write up an experiment sheet before doing each one of these activities.

† Blindfold activity: We take our eyes for granted. In a living room area place an object (such as a small ball) on a low table or on the floor. Go to the farthest end of the room. Take turns blindfolding each other and trying to navigate the room without using your eyes to obtain the ball. Variation of this activity: use oral directions to guide the blindfolded person.

† What color is light? Use a prism. If one is not available, on a nice sunny day take a garden hose outdoors and spray the water, allowing the sunlight to filter through the mist. What do you see? Record your observations. Why does this happen? Remember this name: Roy G. Biv, which stands for red, orange, yellow, green, blue, indigo, and violet (the colors of a rainbow).

† Light wave demonstration: Use a television remote control and a small, hand-held mirror. With your back to a television set (which is turned off), aim the remote into the mirror and try to turn on the TV set. Try this from different points in the room. Why does this happen? (The infrared rays in the remote send a signal to the sensor in your TV set. The mirror reflects this ray.)

† What is air? You can demonstrate the strength of air by using a balloon, a table, and a stack of books. Tie two or three books together with yarn or string. Place the stack of books on

Geography/History
K-3

† Observe a globe and notice the differences between the landforms and the waters. Notice the way the earth tilts. Note the large expanse of the ocean and how small the land mass is compared to the waters.

† Observe the shapes of the continents on a world map. Do you think they could have fit together once? Trace a small world map (or find a picture) and cut out the pieces of the continents. Try to put them together. Notice the way they fit. Scientists theorize that at one time the continents were one large land mass.

† Organize the continents from biggest to smallest. Learn the names of the continents.

† Draw a map of the terrain from a nature walk. Note landforms, rivers, streams, oceans, etc. What do you notice about the areas where water stands? Note this in a nature diary. On your map include a legend showing landforms, water, trees, and other important items.

† Learn the compass directions (north, south, east, west). Use these to play the "direction game." Hide an object, and give children directions, such as "Take two steps to the west; turn to the north and take four steps; turn east and take eight steps." Have them look for the object. Variation: have children use a compass.

† Read Genesis 1. Make a three-dimensional model of the "young earth." Use recyclable materials where possible.

† Study a topographical map of the United States of America. Point out highlands, lowlands, mountains, lakes, rivers, etc. Find your state and place a star on it.

† Find the location on a map of the place where Noah's Ark came to a rest (Mt. Ararat). This is also believed to be one of the areas of the earliest civilizations of man.

† Look at a world map, an atlas, or a globe. Ask the children where they think the Garden of Eden might have been. Research where early people lived.

† Look at a world map and locate the places of the earliest civilizations. Color code these places. Notice most civilizations flourished near water. Discuss this and why it was so important.

† The earliest traces of civilization agreed upon by both evolutionists and Creationists are in the Middle East a few thousand years ago. This fits into the Biblical model very nicely. Following the Flood, each tribe migrated around the world as soon as it could. Within a few generations each developed into its own civilization. The descendants are believed to be

Art and Music
K-3

Art

† God created the sky on the second day. Read Genesis 1:6-8. Explain that sometimes you can discern shapes in the clouds, and see what they can find. Using blue construction paper, glue, and cotton balls, have the children observe the sky and make their own clouds. (A science-related activity would be to teach the different types of clouds.)

† Do a salt painting. Mix 1/2 cup of liquid starch, 2 cups of salt, and 1 cup of water. Color different portions of this mixture with water-based tempera paint powder or food coloring. (Remember that food coloring stains!) Use a heavyweight paper and your salt paint to paint a picture of creation. Your picture will sparkle when it is dry. Variation: use black poster paper or other colors for a neat effect. Create a stormy flood scene or Creation scene.

† Use various sizes of dry beans to create a picture. Glue the beans on the paper and draw designs, or use the beans to create a mosaic. It may be helpful to color in the picture before gluing.

† Make a vegetable print. Using a potato cut in half, carefully cut out a pattern and stamp on brown grocery bags. Crumble up the grocery bags to give texture before stamping. This may be used to wrap gifts. Tie with pretty ribbons or bows.

† Use pipe cleaners to make different types of trees. Some are round, some are triangular, and some look like Christmas trees. A variation on this is to go on a nature walk and collect leaves from various trees. Using the pipe cleaner, create a tree trunk, or draw on a sheet of paper, then glue pipe cleaner and the leaves on the trunk.

† Make Noah's Ark animals out of dough. Use one of the dough recipes on page 142. Use cookie cutter shapes to cut out the dough and allow to air dry or bake.

† Create a snack necklace to take on a nature walk! Use 1 cup of round cereal with a hole in the middle (whatever assortment you wish), a roll of flavored circle candies, etc. Use a shoestring (preferably new) and thread the snack items onto it. Tie and snack as you walk through God's beautiful world.

† Draw or find clip art to depict the days of Creation and create a mobile. Use a wire hanger and hang the various scenes with fishing line or fine thread.

† Fold a piece of paper in half lengthwise and cut it along the fold. Fold one of the strips in half, then in half again. The more folds you make, the smaller your object will be. Draw an object such as a star on the top half of the folded piece of paper. Cut out the star but leave the points on the fold attached. Unfold the paper, and you have a chain.

Creation Science Outline
4-8

Objective: To study Creation through observation, comparison, research, and experiments.

I. Days of Creation
- A. Day equals twenty-four-hour time period — Hebrew meaning of word *Yom*
- B. Day One — Light and dark
- C. Day Two — Waters above and waters below
  1. Water vapor canopy
  2. Increased atmospheric pressure — larger plants and animals
  3. Shielded from harmful radiation — longer life span (see timeline chart on page vi)
  4. Tropical environment worldwide and no storms
  5. Fountains of the great deep — waters below
- D. Day Three — Dry land and plants
- E. Day Four — Sun, moon, and stars
  1. Light before sun
  2. Stars for signs and to mark the seasons, days, years
- F. Day Five — Fish and birds
- G. Day Six — All other animals and Man

II. Flood Geology and Noah's Ark
- A. Ark designed by God — dimensions and capacity
- B. Fountains of the great deep burst forth — Gen. 7:11
- C. Most geological formations we see were formed during the year-long Flood or soon after (the Grand Canyon)
- D. Sediments and fossils deposited by water (aquatic) on every mountain top
- E. Earth's axis tilts
  1. We now have seasons
  2. Polar ice caps form — Ice Age
- F. Evidence for worldwide Flood — flood interpretation fits what is observed
  1. Fossil fish found in swimming position and fossil insects found in flight
  2. Preservation only possible by rapid burial
  3. Submarine canyons cut by receding water — Guyots
  4. Continental sprint and sea floor spreading

III. Evidence for a Young Earth
- A. Radiometric age dating based on false assumptions
  1. A 170-year-old volcanic eruption misdated 160 million to 3 billion years
  2. Problems with carbon dating
- B. The young island that looks old
- C. Erosion — not enough sediment accumulation in ocean basins if earth is old
- D. Stalactites — formed in building basements in fifty years (not millions)
- E. Sun is young
- F. Moon is receding
- G. Number of comets

Lesson Plans

Week 1 — Creation

4-8

Subject Date:	Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Religion Studies	Gen. 1:1-5		Gen. 1:6-8		Gen. 1:9-13
Creation Teaching Outline Timeline chart page vi	I. A-B Days of Creation— Day One		I. C Day Two		I. D Day Three
Reading Selection	Light and dark		Water		Land and plants
Language Arts	Assign ten words from list	Define and write words in sentences	Choose grammar activity	Word meaning bank	Read news for science articles; add vocabulary words to list
Math Reinforcement	Metric system		Make a metric conversion chart		Study area of yard, home and map out
Science Activities and Experiments Days of Creation 1-3	Make vapor canopy	Light wave experiment; magnifying glass and sun's rays	Create rain	Remove oxygen from the air	Grow algae or another plant
Geography/History World Map or Globe	Map skills: study geographical terms	Become familiar with a globe and atlas.	Hypothesize where the Garden of Eden might be located; find on map	Difference between geologists and Creation geologists	Review geographical terms
Art/Music	Stained glass picture	Creation music tape	Finish stain glass picture	Use various instruments; play scales	TS

CR= Creation Resource TS= Teacher Selection

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Vocabulary/Spelling/Grammar: 4-8

† Have the children write riddles for the vocabulary words. Try to guess the words. Use this in a game or create a card game such as "go fish" using the words.

† Find the word origins of a few of the words. What are their countries of origin? Locate the countries on the world map. Is there a story behind any of the words? Try to find the words in the encyclopedia. You may want to use an online source or do a key word search (online). How many words have Greek or Latin roots? Learn why Greek and Latin were widely spoken in countries around the Mediterranean Sea.

† Play "What am I?" with the vocabulary words. For example, "I am larger than the earth, the sun and all the planets, I consist of other solar systems, what am I?" (Answer: universe)

† Assign a word of the day. Before the unit begins make a calendar (placing the day of the week on each card). You may want to use index cards for this activity. Place one vocabulary word on each day. You may borrow from the vocabulary lists from K-3 and 9-12 for this activity. Make use of this word for the day. See who can use the word in context the most times during the day. This is a great way to build your vocabulary.

† Use the vocabulary words to make bingo cards. Use grids of twenty-five. Place five grids across and five grids down. Leave the middle square blank. Insert various words in each grid, leaving a middle space blank and marking it free (if you desire). Play bingo!

Language Arts Ideas
4-8

† Begin an open-ended story. Example: " While taking my sheep to drink from the River Tigris, I spotted a huge footprint. Could it be a dragon (dinosaur) print? I had not seen any recently. Just then I heard a shout in the distance. Looking, I saw the dreaded dragon chasing a band of travelers. Without hesitation I ran in their direction. I knew just what to do...."

† Try different variations of the open-ended story. The creature can be whatever animal you are currently studying. This activity can be done orally in a group with children of different ages.

† Give a paragraph from Genesis as dictation. Have children read the passage first to become familiar with the words. Have younger children copy the paragraph before you begin dictating.

† Research Newton or Kepler. Have children write a paper of no more than 250 words telling about the most notable accomplishments of one of them. Do a rough draft first, double-spaced. They should correct their own spelling, punctuation, etc. If there are other children, have them trade papers and correct each other's, or work together. Rewrite the finished product single-spaced. If you have access to a typewriter or computer, have them type their work.

† Pretend you are doing an interview with Charles Darwin. Ask him questions such as, "What proof do you have that anything evolved?" "Why don't you believe that God created the world?" Continue along this line. Tape this interview!

† Decide whether statements are fact or opinion. Read various statements made in any book found in the library dealing with the earth, astronomy, geology, etc. Decide whether the statements are true or false. For example, in geology there are many claims that the formation of fossils took many millions of years. Use critical thinking skills to determine if such claims are logical!

† Using different forms, write a poem about Creation, evidence for a young earth, fossils, etc.

† Write both sides of a debate, pro and con, about Creation vs. evolution. Variation: have children hold an impromptu debate.

† List several Creation facts and use these in a debate with an evolutionist.

† Pretend evolutionists say they found the Missing Link. What would this mean to Creation scientists and to evolutionists? Write a fictional story of about 800-1000 words.

Math Reinforcement
4-8

† Learn about the metric system. Why is this form of math used in science?

† Make a conversion table. Convert inches, feet, yards, miles, etc. into metric units. Convert cups, quarts, and gallons to liters, ounces and pounds to kilograms, etc.

† Measure an area such as your yard and map it out. Figure out the total square footage. Figure out the total square footage of lawn space. (Subtract the square footage of your home or building.) Convert all measurements to metric.

† Use a protractor, a ruler, and a compass. What shapes can be made with these items? Design as many separate shapes as you can. Combine the different tools and make shapes. Discuss the usefulness of each tool and the limitations of using it in isolation. (How does this apply to our lives and trying to do things with our own strength?) Variation: use geoboards.

† How does an understanding of mathematics tie into scientific principles? Are scientists good mathematicians?

† How did men trade after the Flood? What did they use for money? Why did they trade? What became valuable for trade? Do we use money the same way today? What is bartering? Set up a bartering system.

† Find the highest mountains and write down their heights. Use combinations of these numbers to add, subtract, multiply, and divide.

† List all the gases found in the atmosphere. Write them in percentages, decimals, and fractions.

† Find the early men of the Bible. Add up their ages. How did Creation scientists come up with the figure of the Earth's age? How did evolutionists come up with the figure of the Earth's age?

† Research the calendar system. How was it first devised? How does the moon correlate to the months? How are the orderliness and consistency of the earth's path around the sun a help?

† Here is a fun exercise that requires a large area such as a park. The Ark's measurements are found in Genesis 6: 300 cubits in length, 50 cubits in breadth (width), and 30 cubits in height. An average cubit is 18 inches. Convert cubits to feet. Use different colored string and stakes to mark out the dimensions of the Ark.

† Calculate the Ark's capacity. There have been feasibility studies, and a book was written on this concept. Try your hand at this and then do some research. How accurate were you?

Science Activities and Experiments
4-8

A good understanding of the scientific method is a must at this grade level! (Authors' personal bias!) Many good science books talk about the scientific method (see page 59 for an overview). Remember to formulate your question and hypothesis before you begin an experiment! At this age give children flexibility to experiment. If they have an idea of something they want to try, allow them time to experiment. It is helpful if they write out their procedures using scientific method sheets (copy section begins on page 146). In the event that they invent something wonderful, they will be able to duplicate the experiment! **Always use caution when doing any science projects and experiments. Parental supervision is necessary!**

You may wish to set up experiments under the headings of the Creation Week. To do this plan activities and experiments for Light and Dark; Waters Above and Waters Below; Dry Land and Plants; Sun, Moon, and Stars; Birds and Fish; Animals and Man.

Light and Dark

† What is light? Several noted scientists through the years have disagreed about the properties of light. Research this.

† Take turns blindfolding each other and trying to navigate out of a room. How difficult is this to do without light in order to see? Try giving verbal clues to help the blindfolded person. Does this help? Try your own variations of this activity.

† There are many types of light waves. One example is on your television set and in a flashlight. In a very dark room place your hand on the television screen. Using a flashlight make sure every inch of the television is covered in light except the portion where your palm is. Do this for several minutes, making sure your hand does not move. Remove your hand. What do you see?

† Take a magnifying glass outdoors and try to harness the sun's rays to make a fire. Be careful with this activity! What types of items burn quickly? Which took longer? Chart these.

† Demonstrate the necessity of light for living things to grow. Place one plant in the sunlight and another in a dark closet. Compare them every day. What are the results? What does this tell us about the importance of the light that God created?

Waters Above and Waters Below

† There is much dispute over whether there really was a vapor canopy barrier at some point after God created the world. Research this on www.icr.org or www.answersingenesis.org. Compare what they say.

Science: 4-8

† Study the three properties of matter using water. Which is the most dense?

† What is a vacuum? You can create a demonstration of one with a clear plastic cup (or glass), water, and an index card or other hard paper. Fill a cup with water to the top, then place the index card on top of the filled cup (making sure the paper covers the entire top). Holding the index card against the cup, invert it quickly. Carefully take your hand away from the index card. What happens? Do variations of this experiment with larger cups and larger stiff cards.

† The air that we breathe is mostly made up of oxygen and carbon dioxide. We exhale the carbon dioxide when we breathe. Carbon dioxide may be created by mixing one tablespoon of baking soda with three tablespoons of white vinegar in a bottle. Use this gas to extinguish a candle. You can "pour" out the carbon dioxide. Be creative in your experiment and record your results. Did it work?

† Measure the temperature in the atmosphere. Using a fishing rod and reel, a helium-filled balloon, and an air thermometer, create an experiment to measure the earth's troposphere. Is the temperature warmer on land or above? How much line did you release? Record your results.

† Create rain with the following items: a tea kettle, stove, water, ice cubes, dinner plate, oven mitts. Place a tea kettle full of water on the burner to boil. Once the steam is released, hold the dinner plate with a oven mitt and place several ice cubes on top of the plate, then place the edge of the dish over the steam. What happens? It might be a wise idea to have a tray or large bowl under the dinner plate to catch the "rain."

† Do this activity to remove oxygen from the air. Get some steel wool without soap or anything in it. If it has a protective oily covering, be sure to wash it thoroughly in soapy water and let it dry. Push the steel wool firmly into the bottom of a glass, then turn it upside down into a bowl of water. Observe and record the level of the water inside the glass. (The iron in the steel wool will attract the oxygen and cause it to rust. As more oxygen is changed into iron oxide, the water will be pushed up into the glass, displacing the volume of the oxygen.)

† Air weighs a ton! Did you know that on every square foot of surface, air exerts about a ton of pressure? Prove that air has weight. Obtain several wooden yardsticks from your local hardware store. Place a yardstick on a table so that 6-8 inches sticks out from the edge. Place two sheets of unfolded, flattened newspaper over the part of the yardstick that is on the table. You need to press down on the paper and smooth it out to remove any air from underneath. Do not cover the part that extends out from the table. Now strike the end of the yardstick very hard with your fist or a hammer. (Be careful not to hit anyone else.) Instead of throwing the newspaper up, the yardstick breaks due to the weight of the air! (Moving the

Art/Music Ideas
4-8

Art

† Make a stained glass picture. You will need eggshell, food coloring, vinegar, and liquid white glue. Wash pieces of eggshell and allow to dry. Save eggshell in the freezer until you have enough accumulated for this activity. Each color will need ½ cup of water, ½ teaspoon of vinegar, and 2-3 drops of food coloring. Set up several bowls of color. Crush eggshells and soak in different color dyes for 5-10 minutes. Lay colored shells on wax paper or paper towels to dry. Glue the shells to construction paper. Make a picture of Noah's Ark once it had landed on dry land!

† Make a yarn picture. Have children take a favorite design or artistic scribble to be used for the picture. Cut different lengths of yarn. Dip colored yarn in liquid white glue. Arrange in a pattern on wax paper, overlapping the yarn as you make the design. Allow this to dry. Peel off the wax paper and hang the picture.

† Make sand clay. Cook 1 cup of cornstarch, 2 cups of sifted sand, and 1½ cups of cold water on medium heat, stirring constantly, until the mixture is very thick and holds its shape. Put mixture on a plate and cover with a damp cloth until cool enough to knead. Knead well. Store in an airtight container. Use this clay to make sand castles—a great rainy day activity! Use Popsicle sticks, rulers, and other items to add straight ends, and decorate.

† Keep a nature diary with pictures or photographs. Don't forget to label, date, and note the location. If you have a digital camera, use it to create a book on the computer. Import your pictures and write interesting captions.

† Use objects found in nature to create an abstract picture. Use your imagination; for example, use large leaves and cut out silhouettes of various objects such as buildings, mountains, or streams. Use pine needles to make grass, glue sand to make a path, etc.

† Research the dimensions of Noah's Ark. Draw a picture of Noah's Ark (Variation: using mathematics draw the picture to scale.)

† Soap carving is similar to sculptures—that is, taking a solid object and "releasing" the art within. Sculpting was a popular form of art at the time of the Renaissance. Many masterpieces with religious themes were created out of stone and marble. Use a paring knife or other sharp whittling tool to carve out an object of your choice from a soap bar. If you use a very soft soap be careful; it breaks easily. Try using harder soaps.

† Construct night-light lanterns from empty tin cans. Remove the label and use permanent marker to make dots or a pattern where you would want the holes to appear. Place water in the can and freeze for at least 24 hours. Place the can on its side on a folded towel, then

Creation Science Outline
9-12

Refer to Teaching Outline for more detailed information.

I. Days of Creation
- A. Twenty-four-hour time periods; Hebrew word *yom* means regular day
- B. Day One — Light and dark
- C. Day Two — Waters above and waters below
  1. Water vapor canopy
  2. Increased atmospheric pressure — benefits to longevity and increased size
  3. Shielded from harmful radiation — increased longevity (see timeline on page vi)
  4. Tropical environment worldwide and no storms
  5. Waters below — fountains of the great deep
- D. Day Three — Dry land and plants
- E. Day Four — Sun, moon, and stars
  1. Light before sun
  2. Stars for signs and to mark seasons, days, years
- F. Day Five — Birds and fish
- G. Day Six — All other animals and Man

II. Explain False Concepts
- A. Theistic evolution
- B. Day-age theory
- C. Gap theory

III. Flood Geology and Noah's Ark
- A. Ark designed by God — dimensions and capacity
- B. Gen. 7:11 — fountains of great deep burst forth, and it rained for the first time
- C. Most geological formations we see were formed during the Flood, others soon after.
- D. Water-lain sediments and aquatic fossils on every mountain top
- E. Earth's axis tilts
  1. Now we have seasons
  2. Formation of polar ice caps/ Ice Age
- F. Evidence for worldwide flood — interpretation fits physical evidence
  1. Fossil fish in swimming position — fossil insects with outspread wings
  2. Only preserved by rapid burial
  3. Submarine canyons cut by receding water — Guyots
  4. Mt. Saint Helens and the Grand Canyon
  5. Plate tectonics and continental sprint

IV. Evidence for Young Earth
- A. Radiometric age dating shown to be false — false assumptions
  1. A 170-year-old volcanic eruption misdated 160 million to 3 billion years
  2. Problems with carbon dating
- B. Alpha particles — Larry Vardiman

Lesson Plans

Week 1 — Creation

9-12

Subject Date:	Monday	Tuesday	Wednesday	Thursday	Friday
Bible/Religion Studies	Gen. 1:1-8	Gen. 1:9-19	Gen. 1:20-31	Gen. 2:1-25	TS
Creation Teaching Outline	I. A-B	I. C-D	I. E-G		
Reading Selection	Days 1-2 CR	Days 3-4 CR	Days 5-6 CR	Day 7 God rested	TS CR
Language Arts	Pre-test vocabulary words; assign ten	Develop an idea for a term paper on science topic; research	Use a paragraph from Genesis for dictation	Research the word "covenant" in the Bible	Write the Creation story in your own words
Math Reinforcement	Research the calendar system	Draw a graph of the abundance of life in Cambrian period	Write a conversion table for inches, feet, yards, miles into metric units	What is terminal velocity?	Study the mathematical formulas around us
Science Activities and Experiments Creation Week	How did the universe begin?	TS	Find the volumes of various shapes	Study the steps of the scientific method.; use and explain	Choose an experiment and complete using scientific method
Geography/History World Map or Globe	Review map skills and terminology	Map Identification: beginning of civilization	Timeline from Adam to Abraham	Research when scientists began to doubt Creation	Compare various forms of geography
Art/Music	Colored chalk art	Orderliness of music	Make a bread basket	Music off key activity	

CR= Creation Resource TS= Teacher Selection

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Vocabulary/Spelling/Grammar Ideas
9-12

† Use the vocabulary and spelling words interchangeably in the following activities.

† Give a pre-test of spelling and vocabulary words. This is a good indication of the words that need to be studied. Dictate the words or put them on audiocassette. Students can spell them and give a brief definition of each word.

† Look up the words in a dictionary, science dictionary, encyclopedia, or online. Write brief definitions for each word. Write the words into sentences using a variety of the parts of speech. Place the definitions on index cards to use in other activities or make up your own game.

† Use the sentences to label (or diagram) parts of speech. Use resources such as a good grammar handbook to check your answers.

† Use the vocabulary words to write a paragraph or story. Check for proper spelling, punctuation, usage, and form. Use a variety of sentence openers. Most people begin with subject and verb as openings for sentences. Try varying this approach using a preposition; words that end in "ly" or "ing"; clausal words such as although, since, while, where, as, if, etc.; very short sentences; and words that end in "ed."

† Make a list of words that you cannot use in writing your sentences, such as said, like, go, nice, pretty, see. Start a taboo word list and add to this list of overused words. Make an attempt to broaden your vocabulary with words that stretch the imagination. Use a thesaurus or invest in a handheld spell checker or computer-generated dictionary. Use these resources and watch your writing improve dramatically.

† Have the student make a crossword puzzle using the vocabulary words. Try to use the definitions you have researched. (Let the parents try, too!)

† Have students create a word search puzzle on a large poster board. Put in as many of the vocabulary words as possible.

† Try finding as many smaller words within the vocabulary words as possible. List these. Which word contains the most small words?

† Keep a list of words you may not know the meaning of from your reading. Look up these words and keep a vocabulary list. Try to use these new words daily if the opportunity arises.

† Define the words archaeologist, anthropologist, and paleontologist. Compare and contrast

Language Arts
9-12

† God is the Great Creator of the Heavens. He has assigned each of the stars a specific place. Read Psalm 19:1-4 as a Christian astronomer and write what it means in your own words.

† The Bible is a great science book. Read Psalm 104. Make a list of the scientific observations in this chapter.

† Read the Book of Job. What does God say about Creation? Make a list of all references to Creation.

† Read *The Origin of Species* by Charles Darwin. Be aware of this chapter (Chapter 6) admitting difficulties with his own theory of evolution. Compare it to the Biblical account of specific Creation (Genesis 1-2) in about 250 words.

† Write down the pros and cons of Creation vs. evolution under each heading, Creation Pro and Con, Evolution Pro and Con. Try for six or seven of each.

† Explain the difficulty of a transitional creature trying to function while it is evolving. Write a fictional account of a creature with five percent of a new eye or five percent of a new wing. What difficulties would he encounter? Would there be any benefits? How would it find food, shelter, a mate, grow and reproduce? Draw pictures to accompany your story.

† Where is the evidence of transitional fossils? Write a brief overview (100 words) of what the fossil record actually shows. Your explanation should include the words “stasis” and “extinction” in the proper context.

† Pretend you are a reporter and write an article for a newspaper called the *Creation Times.* Write a exposé in 250 words or less uncovering fraud in evolutionary claims. (Hint: Piltdown Man.)

† Does the Bible teach that the Earth is flat? What Scripture did Columbus use to indicate (for himself) that the Earth was a sphere? When did people first calculate the circumference of the earth?

† You are the key spokesperson for the Creation Institute in your hometown. A newspaper reporter has left a message on your cell phone informing you that the “Missing Link” has been found. He wants to hear your response to this extraordinary find. What research will you do before calling him back? What facts will you gather to counteract his claims? Write a 200-word rebuttal.

† Many people now claim they do believe in evolution, but not neo-Darwinian evolution.

Mathematics and Probability
9-12

† How does random chance work? Roll a die six times and try to get one through six in sequential order. (Repeat this process several times.) What is the probability of obtaining this outcome? Chart your results.

† Record the results of twenty-five coins "flipped" at one time. What is the probability that you will get twenty-five heads at one time? Repeat this process several times and record the outcomes. Relate this to the formation of DNA chains, which have to contain one hundred percent left-handed molecules in order to be useful to living organisms.

† What assumptions are used in radiometric dating? What are some faults with these assumptions? (See Teaching Outline section IV.)

† Calculate the capacity (volume) of the Ark (Gen. 6:15) in feet, cubits, and meters.

† What is the ratio of a cubit to a foot?

† How long did it take to build the Ark? How long were Noah and his family in the Ark?

† What is a parabolic curve?

† What measuring system is used in scientific experiments? Why?

† Write a conversion table. Convert inches, feet, yards, and miles into metric units. For fun, convert cubits into metric units.

† The Law of Gravity states: the force of gravity is proportional to the product of the two masses and inversely proportional to the square of the distance between their centers of mass. [Gravitational force = $(G \times m_1 \times m_2)/d^2$] What is the equation for Force? [F=ma] What is the formula for the earth's gravitational force? [weight = mass x gravity; gravity = weight divided by mass; gravity equals the force of attraction between two masses: $F=Gm_1m_2/r^2$.] What is Newton's gravitational constant? [$9.8m / s^2$, where m=mass and s=seconds; this is the same thing as gravitation at the earth's surface.] Explain acceleration of a falling body. [32 feet per second per second] This may be oral or written.

† What is terminal velocity? Why does a falling body reach a terminal velocity? (Wind resistance.)

† In Biblical times man lived much longer than he does today. List some of the ages of ancient man from Biblical records. How was the age of the earth determined? Research this.

Science Activities and Experiments
9-12

† According to the Big Bang theory, how did the universe begin? Create your own "Big Bang" with a paper bag. Fill a paper bag with twenty Popsicle sticks. Inflate the bag and pop it. Do the Popsicle sticks form a house (or any distinct pattern or design)? How can you get order from chaos?

† What is the basis for Darwinian evolution? What is uniformitarianism? List some of the problems with a uniformitarian approach.

† What was the world like prior to the Flood? Describe what you think the "pre-Flood earth" (antediluvian) looked like. Use the Bible for ideas. Describe the post-Flood earth and make a comparison.

† Find at least three scientific ideas that were stated in the Bible long before science discovered them. For example: Isaiah 40:22 says, "He sits enthroned above the circle of the earth" (Isaiah was written around 760 B.C.) Job 38:7 says that at creation the stars sang, but radio-astronomers did not hear it until the 1950s.

† What does "science" mean? Does the Bible have to fit into science? Should science fit into the Bible? Is the Creation process or the evolution process repeatable in a laboratory? If it is not science, what is it? Write a one-page paper explaining your thoughts.

† What is the Law of Biogenesis, and who stated it? Boil chicken broth, put it into a jar with a tight-fitting lid, and observe for several weeks. Is anything growing from this broth? What do you see? Record your results. (Francesco Redi's original experiment, still on display in a museum in France, shows no growth.)

† What did Francesco Redi prove? Try his experiment. With your mother's approval, put raw meat scraps in each of three jars. Leave one open, cover one with gauze held by a rubber band, and seal one tightly with a lid. Leave jars outside on a porch if possible (or in a house where many flies are present!). Observe for several days, and record your observations. What happened in each jar? How does this show that spontaneous generation does not occur?

† What is wrong with the fossil record from Darwin's viewpoint? Are there any transitional forms of animals, plants, or people? If scientists found many transitional fossils, how would that affect the standard classification system?

† How does evolution explain the abrupt appearance of an abundance of life in the Cambrian period supposedly over 500 million years ago? Draw a graph of life found in the pre-Cambrian period vs. life found in the Cambrian period. Nearly every phylum is found in the Cambrian, including completely vertebrate fish. How does the specific creation of "kinds"