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Leaders Guide

# Fossils and Faith

## Finding Our Way Through the Creation Controversy

Thea Leunk

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# Fossils and Faith

## Finding Our Way Through the Creation Controversy

Thea Nyhoff Leunk

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For Bob Leunk, because the Lord of his life is also the Lord of his lab.

# Contents

How to Use This Course
Organization and Materials . . . . . 7
Time Frame . . . . . 8
Getting Started . . . . . 8
Thinking Inside the Room . . . . . 9
Getting Outside the Room . . . . . 9
Additional Resources . . . . . 9
Stewardship Suggestions . . . . . 12

Session 1 In the Beginning, God . . . . . 13

Session 2 The Heavens Declare . . . . . 21

Session 3 God Has Made Everything Beautiful in Its Time . . . . . 29

Session 4 When I Consider . . . . . 37

Reproducible Pages . . . . . 45

# How to Use This Course

God has not left this world without ways of knowing him. He shows his power and majesty in the creation; he has mercifully spoken through prophets, history writers, poets, gospel writers, and apostles—and most clearly through the Son." Stanza 34 of *Our World Belongs to God: A Contemporary Testimony* expresses the two ways through which we know God: general and special revelation.

These two are not opposites; they are bookends that together show us who God is and who we are. As John Calvin points out at the beginning of his *Institutes,* knowing God lets us know ourselves. When we know the Creator and Savior, we know why, what, and who we are. Biology tells us that we are *Homo sapiens;* Genesis tells us that we are created in God's image. Both are true. When we think that science conflicts with or even contradicts the Bible, problems arise.

Useful for high school students in grades eleven and twelve or young adults/adults in either a day school or church school setting, this course will help you and your group appreciate different perspectives on understanding creation—perspectives that complement each other. During this four-session course, you will explore how Christians have come to reconcile apparent disagreements and reflect on how they might also prepare to wrestle with the issues. As a community of Christians, we can all come to the core truth: "We believe in one God, the Creator of the heavens and the earth."

## Organization and Materials

*Fossils and Faith* is a four-session course that covers issues raised in the current debate between scientific and biblical views of creation. These issues are presented in a Reformed, Protestant context, but no one position has been selected as the "best" or "most faithful" answer. Instead, this course presents a full range of the various positions that Christians have articulated.

The sessions are designed to present and explain the key issues of this debate. Discussing the various issues will help members of your group articulate more clearly what they believe.

One participant newspaper is provided for each session. The newspapers offer summary descriptions, not detailed accounts, of the issues involved. Consult other reference materials for deeper and broader perspectives on the topics. Each newspaper allows for celebration of our Creator and the wonderful world we enjoy. (Unless otherwise noted, Bible quotations in the participant newspapers are from the NIV.) After each newspaper is used in the classroom, participants may bring them home and read any articles not covered in your session.

This leader's guide provides direction for reading and discussing the articles. It highlights ways to extend the session both inside and outside the classroom and suggests how to use the materials in an adult setting.

You do not need to be a professional science teacher or have other scientific interests or credentials to lead this course. The leader's guide is written in easy-to-follow steps that do not require extensive preparation or technical knowledge or materials.

## Time Frame

The four sessions are designed to be fifty to sixty minutes each, but each can be easily expanded to a ninety-minute session or even two sessions. It would be possible, for example, to begin with one of the suggested videos and then follow up with the discussion of the newspaper content. You could add an additional session or two for science field trips. It is highly recommended, in fact, that you conclude the course with a weekend retreat to extend the study of the creation week by celebrating Sabbath together.

Specific suggestions for extending the time frame are found at the end of each session, and, occasionally, in notes within the sessions.

If you are using this course in a **day school** setting, it can be an extension of a study about the theory of evolution or astronomy. Expanded research, labs, biographies, guest speakers, field trips, video resources, and media presentations can supplement the course. The newspapers serve only to introduce the topics, not to explore them in depth. (So relax—you can do this!)

If you are using this material in a **church school** setting, you may need to eliminate or reduce some of the learning activities to fit the time you have available. We've provided numerous "Church School Tips" for timesaving suggestions. Another approach is to divide the sessions in half, getting as far as you can the first week and finishing the second. Be advised that the first session is the longest of the four—and be prepared to adapt it to your time frame.

If you are using this course with young adults or adults, ascertain participants' interests and backgrounds as you plan the course. Any group member with scientific training or interests could be a valuable resource during the discussion. Remember that this course is geared to high school juniors and seniors, so you will need to adapt it somewhat for adult use. Specific suggestions for doing that are included at the end of every session.

## Getting Started

Here is a suggested planning outline for this course.

1. Read through the materials. Capture the flavor of the participant newspapers and the overall direction of the course. Decide which optional activities to include.
2. Decide which, if any, field trips to organize, and make initial contacts.
3. You may want to substitute a video or part of a video for an article or articles in the newspaper. Consider researching some additional resources. You could, for example, check the TRAVARCA video and DVD offerings (see Additional Resources) to determine which videos would be useful, and reserve them (see listings on p. 10). Or you could check out the resources available in a local library, as well as the various websites listed in the participant newspapers. Consider purchasing some of the print resources listed on page 9; they would be excellent additions to a church library when you are finished with them.
4. Learn. Read at least one of the suggested resources for a broader and more detailed perspective on these issues.
5. Decide how you will enhance the learning environment (see Thinking Inside the Room, p. 9). Begin your preparations, or ask someone to assist you.
6. Prepare a calendar for participants (and their parents, if appropriate) to be distributed at the first session. Consider purchasing folders or notebooks for participants to store the resources.

## Thinking Inside the Room

Use the meeting space to create interest in the sessions. Here are some ideas. (You may have even better ones.)

- Post the session titles on large, colorful banners.
- Post quotations from the participant newspapers on brightly colored paper.
- Set up a lending library of the books that are suggested as resources.
- Find biographies of the scientists mentioned and bibliographies of their major works, and make them available to the group.
- Display various resources from your local library. (Picture books may add color and interest.)
- Put a cosmos on your ceiling. Purchase a kit from a teacher supply store, or recruit some participants to help make one. The display doesn't need to be a scientific model—you could duplicate Van Gogh's *Starry Night* (see session 2 newspaper) or have everyone contribute their own versions of the stars and planets.
- Post the science news from newspapers and news magazines.
- Make a collage showing everyone's favorite part of nature. Have each person bring a photo or magazine picture of a favorite plant or animal.
- Borrow and display science objects. (A fellow church member or teacher may be happy to lend and describe an interesting collection.)

## Getting Outside the Room

The best way to help your group learn is to facilitate their firsthand experiences. Consider adding the following experiences to the course:

- Ask a scientist from a local company, college, or research facility to arrange a tour of its labs and demonstrate research procedures.
- Invite a scientist who is a Christian to speak about his or her field of study and calling.
- Contact your local park district or wildlife conservation office to learn what particular habitats are unique to your area. If one of these habitats is open to the public, arrange a guided tour.
- Visit a significant research institution such as an observatory or marine study center.
- Arrange a campus tour of the science buildings of a local college or university.
- Visit a natural history museum, planetarium, aquarium, or zoo. If possible, arrange for a guide.
- Take a fossil hunt or nature walk.
- Visit a garbage dump, landfill, or water treatment facility.
- Commit to a long-term service project on earthkeeping. (See suggestions in session 4.)

## Additional Resources

### Print Resources

Committee for Integrity in Science Education Staff. *Teaching Science in a Climate of Controversy.* Ipswich, Mass.: American Scientific Affiliation, 1993. Includes activities for students and helpful strategies for teachers on topics related to origins.

Davis, Kenneth C. *Don't Know Much about the Universe.* New York: HarperCollins, 2001. Presents an overview of the history of astronomy, the development of calendars, and the basics of the universe for the layperson.

DeWitt, Calvin B. *Earth-Wise: A Biblical Response to Environmental Issues.* Grand Rapids: CRC Publications, 1994. Details the wonders of God's creation, the abuse of creation by humanity, and appropriate Christian responses. Includes discussion questions for group settings.

Fischer, Robert B. *God Did It, But How?: Relationships Between the Bible and Science.* Ipswich, Mass.: American Scientific Affiliation, 1997. Helps fit together the Bible and modern science, separating the who and

why from the what and how without divorcing faith from reason.

Hoezee, Scott E. *Proclaim the Wonder: Engaging Science on Sunday.* Grand Rapids: Baker, 2003. Establishes that theology and science don't necessarily clash; points out the theological implications of certain scientific facts.

Levy, David. *More Things in Heaven and Earth.* Wolfville, Nova Scotia: Wombat Press, 1997. Argues the fundamental unity of the arts and sciences: astronomy is not just for astronomers!

Miller, Keith B., ed. *Perspectives on an Evolving Creation.* Grand Rapids: Eerdmans, 2003. Explores a Christian perspective of evolutionary theory and debunks the conflict between evolutionary theory and faith. Addresses biblical and scientific background, scientific evidence for evolving creation, and theological issues related to evolution.

Moreland, J. P., and John Mark Reynolds, eds. *Three Views on Creation and Evolution.* Grand Rapids: Zondervan, 1999. Leading voices discuss young earth creation, old earth creation, and theistic evolution/evolutionary creation.

Plantinga, Cornelius, Jr. *Engaging God's World.* Grand Rapids: Eerdmans, 2002. A guide to using skills, knowledge, and virtues in God's service.

*Psalter Hymnal.* Grand Rapids: CRC Publications, 1987. Contains the Psalter, hymns, and Reformed and ecumenical creeds.

Reagan, Michael, ed. *The Hand of God: Thoughts and Images Reflecting the Spirit of the Universe.* Radnor, Penn.: Templeton Foundation, 2001. A collection of images of stars and planets from the Hubble Telescope and quotations from various writers work together to show the order of the universe.

*Sing! A New Creation* Grand Rapids: CRC Publications, Reformed Church Press, Calvin Institute of Christian Worship, 2001. Offers more than 270 songs from the best of new hymns, global sources, and choruses.

*Songs for LiFE.* Grand Rapids: CRC Publications, 1994. Includes traditional hymns and new songs geared for children.

Taylor, Barbara Brown. *The Luminous Web: Essays on Science and Religion.* Cambridge, Mass.: Cowley, 2000. Explains what Christians can learn from science and suggests how Christians can close the gap between spiritual and physical matters.

Van Till, Howard, et al. *Portraits of Creation: Biblical and Scientific Perspectives on the World's Formation.* Grand Rapids: Eerdmans, 1990. Analysis of contemporary Christian thinking about the doctrine of creation.

Young, Davis. *Christianity and the Age of the Earth.* Thousand Oaks, Calif.: Artisan, 1988. Argument for an old earth from a geological perspective.

## Video Resources

These resources are available from TRAVARCA, an audiovisual library serving the Reformed Church in America and the Christian Reformed Church in North America. For information and updates to the list below, contact TRAVARCA at 1-800-968-7221 or orders@rca.org.

*Dust to Glory 1: An Overview of the Bible* with R. C. Sproul. Dust to Glory series. The first two messages are "Creation" and "The Image of God in Man" (23 minutes each).

*From a Dream to Destruction.* Jerusalem with Martin Gilbert series. The first video in this series covers creation through the destruction by the Romans in A.D. 70 (100 minutes).

*Genesis 1: A Living Conversation.* A Living Conversation series with Bill Moyers.

Episode 1, "In God's Image," discusses the creation story (60 minutes).

*In the Beginning: The Creationist Controversy.* The Creationist Controversy series. This two-part series looks at the ongoing debate between Christian-oriented creationists and scientifically directed evolutionists (55 minutes each).

*The Message of the Myth.* Joseph Campbell and Bill Moyers compare the creation story in Genesis with creation stories from religions around the world (60 minutes).

*Whose World Is It?* Questions of Faith 4 series. Contemporary thinkers respond to the following questions: What does your faith suggest our attitude should be toward all of nature? How do you weigh the global environmental crisis against global human suffering? What can or should churches or synagogues do about the threat to the environment? What can the individual do? (22 minutes).

## Different Renditions of the Creation Story

*At One with Creation.* Louisville: Presbyterian Church (USA), 1993. Videocassette. A 15-minute animated creation story that reflects on God's love and our misuse of creation.

*The Book of Genesis.* New Media Bible series. New York: The Genesis Project, Inc., 1979. 4 videocassettes. Film version of the Book of Genesis. Each video is 80-100 minutes; watch the first video for Genesis 1-2.

*The Creation.* The Greatest Stories Ever Told series. Nashville: Broadman and Holmann, 1998. Illustrated children's book of the creation.

Earthworks Group. *50 Simple Things You Can Do to Save the Earth.* Berkeley: Pub GroupWest, 1989. This title includes research summaries about environmental issues and ideas for raising awareness and helping the environment.

*The Electronic Campfire.* Westlake Village, Calif.: Cathedral Films and Video, 1993. Videocassette. Creation is one of five stories told in the oral storytelling tradition on this 32-minute video.

*Genesis.* Charlton Heston Presents the Bible series. New York: Goodtimes Home Video, 1997. Videocassette. Charlton Heston leads a journey through the Holy Land while telling the story of Genesis in this 90-minute documentary film.

Johnson, James Weldon. *God's Trombones.* New York: Penguin, 1990. Also available as a videocassette. Seven poems inspired by African-American sermons.

Wangerin, Walter. *The Book of God.* Grand Rapids: Zondervan, 1998. Storyteller Wangerin retells the Bible as a novel.

## Music Resources

### Songs

"All Creatures of Our God and King"
"All Things Bright and Beautiful"
"Beautiful Savior"
"Earth and All Stars"
"For the Beauty of the Earth"
"For the Fruits of His Creation"
"God of Everlasting Glory"
"God of Wonders, Beyond Our Galaxy"
"Gracious God of All Creation"
"The Heavens Declare Your Glory"
"How Great Thou Art"
"I Sing the Mighty Power of God"
"I Want to Walk as a Child of the Light"
"Let All Things Now Living"
"Lord Most High"
"Lord, You Are More Beautiful Than Diamonds"
"O Lord God, Thou Hast Made the Heavens"
"O Lord, Our Lord, How Majestic Is Your Name"
"O Worship the King"
"This Is My Father's World"
"We Bow Down"

## Recordings

*The Creation* by Franz Joseph Haydn
*Hallelujahs* by Chris Rice
*New World Symphony* by Antonín Dvorák
*Starkindler* by Michael Card
*The Planets* by Gustav Holst
*The Praise Goes On* by Chris Rice

## Other Resources

*Reformed Worship.* March 2004, Vol. 71. "The Heavens Declare: Resources on the Theme of Creation" pp. 10-12. Lamaire, Paul. "Our World Belongs to God: A Hymn Festival of Praise to the Creator" pp. 40-41.

*The Worship Sourcebook.* Grand Rapids: Faith Alive Christian Resources, 2004. Worship resources are available in Part Two under "The Creation."

Calvin College's Ministry Resource Center at the Hekman Library also has useful resources on these topics. Search the site www.calvin.edu/library/mrc for resources about religion and science, apologetics, astronomy-religious aspects, cosmology, and creationism.

## Websites

*Note:* While all of the following websites were up and running at the time this leader's guide was printed, some sites may no longer be available or may have changed their address.

Affiliation of Christian Geologists (www.wheaton.edu/ACG/index.stm). Search for essays and other resources on geology.

American Scientific Affiliation (www.asa3.org). Search for resources that discuss Christianity and science.

Au Sable Institute of Environmental Studies (www.ausable.org). Search for resources on environmental education.

Canadian Scientific and Christian Affiliation (www.csca.ca). Search for resources on bioethics, cosmology, evolution, and much more.

Origins and Design webzine (www.arn.org/odesign/odesign.htm). Published by the Access Research Network, this online journal provides discussion on science, technology, and society.

# Stewardship Suggestions

Your denomination may have a mission that works with other denominations or Christian traditions to serve a particular group or area in fighting diseases, affecting sustainable environmental changes, or producing community changes. Consider challenging your group to support this ministry with money and prayer.

A local organization that helps beautify a high-need neighborhood or provides garden space, tools, or recreational resources to the neighborhood would also be a good partner for a stewardship project.

Session 1

# In the Beginning, God

## Scripture/Reformed Confessions

Genesis 1 and 2; Apostles' Creed; *Our World Belongs to God,* stanzas 8-10

## Session Focus

Applying Reformed hermeneutics to Genesis 1 and 2 can help us understand the questions of our origins that the Bible does answer and how it answers them. (Hermeneutics is the work of interpreting what the biblical text means for us today.)

## Session Goals

- To use Reformed hermeneutics to read and understand the two Genesis accounts of how God created the world and human beings.
- To identify key confessional statements that these accounts make about human beings, the world, and their relationship to their Creator.
- To reflect on what it means to be created in God's image.
- To praise God for the loving thoughtfulness and beauty of creation.

## Leader Background

In order to discuss creation, we must also discuss the Creator; the one assumes the other. Genesis asserts that there is a Creator who not only created but continues to care about that creation. Our world belongs to God. Who is that God who also is our Creator?

The two accounts of God's activity in creation describe that Creator in different ways. Genesis 1 portrays God as a distant sovereign creating a new world by speaking it into being. This Creator is a master designer with an orderly, thoughtful set of construction plans. Genesis 2 shows God as intimate, kneeling on the ground to mold mud into the shape of a human being and breathing it to life. God is the potter and the surgeon who places the man under anesthesia to perform the delicate operation of creating the woman.

These two pictures of the Creator, one transcendent and the other immanent, are meant to be read together. Together they describe God's nature for us—the God of the cosmos and the God of our everyday lives. Both aspects of God's nature are essential. If we overemphasize God's transcendence, then our Creator can quickly become the distant God who created a world and then moved on to more exciting projects. If we overstate God's immanence, then we risk turning our Creator into a warm, fuzzy deity who simply wants to be our friend. The writer of Genesis wisely gives us both pictures.

The task of the session leader is to clearly communicate both Creator images. When we consider that we are created in the Creator's image, the pictures become even more important. How do we, the creatures of that hand, reflect both God's transcendence and immanence? In what ways are we royalty demanding obedience, and how are we craftspeople who use skills on others' behalf?

"Without knowledge of self there is no knowledge of God," and "without knowledge of God there is no knowledge of self," says John Calvin in the opening chapter of *Institutes of the Christian Religion.* Help the group make this connection as you affirm the confessional statements of the Genesis accounts. This will be a strong starting point from which to explore the coming dimensions of this study.

*Note:* John H. Stek (emeritus professor of Old Testament at Calvin Theological Seminary) has written a helpful exegetical study of the Genesis accounts. "What Says the Scripture?" is chapter 7 in *Portraits of Creation: Biblical and Scientific Perspectives on the World's Formation.* You may want to read it in preparation for this session.

## Materials

### Leader

- Participant newspaper: In the Beginning, God
- Bible
- Human Bingo game (reproducible page 45), optional
- Clear glass or plastic bowl with a wide opening
- Supplies for creative response (see step 4)
- Recorded music, song books, or copies of songs, optional

### Participants

- Participant newspaper: In the Beginning, God
- Bible
- Pens
- "Responsive Reading from Genesis 1:1-2:4a" (reproducible page 47)
- "How Did the Creator Do It?" (reproducible page 49)
- "Reflecting Telescope" (reproducible page 51), optional

## Session at a Glance

*Getting Started:* We are introduced to each other and to this course and its schedule (5-10 minutes).

*Step 1:* Using articles from the newspaper, we read and study Genesis 1 and compare it to the ancient Near Eastern creation accounts (20-30 minutes).

*Step 2:* We read and study Genesis 2, then complete a chart comparing it with the Genesis 1 account (20-25 minutes).

*Step 3:* We reflect on what it means to be created in God's image (5-10 minutes).

*Step 4:* We celebrate our Creator through a variety of responses (5-30 minutes or more).

*Note:* These sessions assume a time period of fifty to sixty minutes. You can easily expand that time by using optional articles printed in the participant newspaper, optional celebration ideas, and the suggestions in the course introduction.

If you are using this material in a day school setting, also see Extending the Session.

If you are using this material in a church school setting, refer to the Church School Tips in the margins for timesaving suggestions. This first session is longer than the others, so you will certainly need to decide ahead of time which activities to abbreviate or drop. The tips will help you fit the session into your time limits. Another approach is to divide this first session in half, getting as far as you can the first week and finishing the second.

## Getting Started

If this is the first time you've met as a group, spend a few minutes getting to know each other by playing a round of Human Bingo (see reproducible page 45). Give participants time to collect signatures on their game sheets, and, if you wish, award a small prize (like a fossilized rock) to the person who completes the most squares in the designated time. If there's a tie, give the prize to the person who has the greatest number of different signatures.

After the game, briefly explain what you'll be studying in this course. Show participants the four participant newspapers and anything you've set up in the room, and discuss or distribute the course schedule. Announce field trip dates and any other assignments. (See the course introduction for ways to enhance the sessions.)

## Step 1: Consider

Distribute the newspapers and ask for a volunteer or several volunteers to read "Who Started It?" (p. 1). Read the entire article, including the section called "Ezekiel's Story."

Without discussion, distribute copies of the Genesis 1:1-2:4a responsive reading (reproducible page 47). Read it through, having one student read the leader's lines and the others the group lines. After the reading, ask questions like these:

- **What repeated pattern do you see in the accounts of God's creative activity from day to day?** (God calls something into being by saying, "Let there be . . ."; it comes into being; details are described; God declares it good.)
- **What relationship is there between the first and the fourth days? The second and the fifth? The third and the sixth?** (The second one populates the first one.)
- **What do these patterns tell us about the Creator?**
- **Why is the sixth day longer and slower than the other days?**

Have the group look at the drawing of ancient Near Eastern cosmology on page 3 of their newspapers. Define *cosmology.* ("How one understands the world to exist as an interrelated system.")

Hold a clear bowl upside down above your head and look up into it. (Let participants try this too.) Discuss the idea of the firmament being a clear ceiling that held back the water behind it. Point out that this notion of the universe is a natural result of simply looking up at the sky and around to the horizon. It's not as farfetched as it seems! Ask,

- **How does the Genesis 1 account of creation reflect someone who has this understanding of the universe?**

Remind the group of the Babylonian creation story. Ask questions like these:

- **How does the Genesis 1 account of creation contradict the Babylonian one?**
- **What key faith statements does the Genesis 1 account make about Israel's God as opposed to the Babylonian gods?**
- **Based on the Genesis 1 account, what adjectives would you use to describe God?**
- **What does the Genesis 1 account tell us about God's act of creating and the creation itself?**
- **What does the Genesis 1 creation account ask you, a believer in the true God, to confess?** (Emphasize that God created everything, including things other cultures may worship as gods, such as the sun. God built a purpose into creation. Creation didn't happen carelessly or sloppily; it happened with intention and careful planning. God made a special point of creating human beings and gave us instructions on what we are to do. All of creation is good.)

  You may want to read "In the Beginning, God" from *Our World Belongs to God* (newspaper, p. 6) as a summary of this question.

Give group members a few minutes to read silently the article "Hermeneutics and Exegesis" (newspaper, p. 2). Ask if anyone has any questions about the article. Can the group point out how the previous discussion of Genesis 1 followed the guidelines of Reformed Bible reading?

## Church School Tip

**The Human Bingo game is lots of fun, but if time is an issue you can skip it and just give a brief introduction to the course.**

## Church School Tip

**Instead of reading the entire article "Who Started It?" read only the paragraph beginning "Imagine hearing this story . . ." This paragraph summarizes the article. Also omit the section of the article called "Ezekiel's story" and go directly to the Genesis 1:1-2:4 responsive reading (reproducible page 47) and the questions that follow.**

## Church School Tip

**If necessary, save time by omitting "The Great Irrigation Project" and go directly to Genesis 2:4-25, reading it from page 3 or directly from your Bibles.**

## Step 2: Discover

Have volunteers read aloud "The Great Irrigation Project" (newspaper, p. 2), followed by Genesis 2:4-25 (newspaper, p. 3).

### Session Extension

As a challenging option, ask the group how they would draw the cosmology of the Genesis 2 creation account? *(Hint:* If Genesis 1 is a pyramid with human beings at the top, could Genesis 2 be about bigger and bigger circles of life?)

Distribute the comparison chart "How Did the Creator Do It?" (reproducible page 49), and divide the group into pairs. Give participants ten minutes to complete the chart. Compare answers together, and help participants fill in what they didn't get on their own.

Explore how the two creation stories give us two different pictures of God by asking questions like these:

- **If the Genesis 1 account is more like a poem, what is the Genesis 2 account like?**
- **What view of God do we find in Genesis 1?** (Write the words *omnipotent*—"all-powerful, supreme"—and *transcendent*—"high above everything, distant"—on the board or newsprint, and define them.)
- **In what ways is the Creator in Genesis 1 this kind of God?**
- **What view of humans do we find in Genesis 1? What does it mean to have dominion? How is human dominion over the rest of creation like God's omnipotence?**
- **What view of God does Genesis 2 show us?** (Write the words *anthropomorphic*—"having human characteristics"—and *immanent*—"close at hand, intimate"—on the board or newsprint, and define them.)
- **In what ways is the Creator in Genesis 2 this kind of God?**
- **What view of humans does Genesis 2 give us? How is the naming of the animals in Genesis 2:20 like the Creator portrayed in Genesis 2?**
- **Taken together, what do these creation accounts tell us about the Creator? Why do you think God gave us two accounts of creation in Genesis?**

### Session Extension

Have your group read Psalm 104 and John 1, and ask these same questions of these creation accounts.

## Step 3: Reflect

Have the group read silently the brief article "Me and My Mirror: Image of God" (newspaper, p. 4). Call attention to the three "Bring Your Brain" questions next to the article, and ask the group to reflect quietly on these when they finish:

- **What are human beings?**
- **Who am I?**
- **Why did God make me?**

Remind the group that these are key questions that all of us need to answer. Our answers determine how we relate to God and to others, and how we see ourselves.

## Step 4: Celebrate

Let the group catch your own sense of gratitude and celebration as you mention that God's creation is truly amazing and that we as creatures made in God's image are part of that wonderful creation. That's worth celebrating!

As much as your time and materials permit, let group members choose a way to celebrate the story of how God created them. You may want to play music while participants work. Use praise music or classical works such as Haydn's oratorio *The Creation,* Dvorák's *New World Symphony,* Holst's *The Planets,* or Michael Card's *Starkindler.* Depending on the weather, some participants may wish to work outside.

Some suggestions follow, but feel free to add your own ideas!

- Read responsively the "Prayer of Praise to our Creator" (newspaper, p. 6). Have the whole group read the bold print.
- Read in unison the sections from *Our World Belongs to God* (newspaper, p. 6).
- Ask for volunteers to read "The Creation" aloud (newspaper, p. 6), or read it yourself.
- Sing or listen to "Morning Has Broken," "Majesty," "We Bow Down," or other favorite hymns of praise for God's creation. If time permits, have group members add dance movements to the song of their choice.
- Have group members offer sentence prayers of praise for some particular part of God's creation. Give group members the option of kneeling or using another body posture to show their awe of God's creative power.
- Have small groups use Job 38:4-7 (newspaper, p. 5) to create a liturgy of praise for worship. Ask your worship leader to use it in a worship service during the weeks this study is taking place.
- Using the Escher tessellation (newspaper, p. 5) as an example, depict the creation of one of the animals. Participants will need markers and newsprint or poster paper.
- Distribute Play-Doh or clay and have group members invent and name new animals.
- Write a poem or prayer that thanks God for a particular aspect of creation—the human hand, the armadillo, and so on.
- Use Legos to create a model of the ancient Near Eastern cosmology described in the session.
- Provide picture books of the creation story (such as *God Created* by Mark Francisco Bezzuti-Jones and *Creation* by Gerald McDermott) and provide markers, paint, and paper for creating a picture book or an illustration of one of the creation stories. Check out your church library, public library, or a Christian bookstore for further ideas.
- Obtain the storybook *In the Beginning: Creation Stories from Around the World* by Virginia Hamilton. Choose one of the stories as a model for rewriting one of the Genesis accounts of creation.
- Bring in several modern translations of the Bible, and have participants rewrite one of the Genesis accounts in contemporary English.
- Read "Midrash" (newspaper, p. 4) and have participants attempt to write their own midrash of creation.
- Suggest that a small group or pair might try inventing the perfect human being. They can create their human as a physical model with newsprint and markers or capture a description on paper.

If group members are working individually on the project of their choice, have them share their creations. Wrap up the session with a song and/or prayer (see suggestions above).

## Extending the Session

- Have an artist or skilled craftsperson discuss his or her call to creativity with the group.
- Invite a local photographer to show and talk about scenic or wildlife pictures.
- Ask a birder to take the group on a bird-watching hike.
- Consult the TRAVARCA resources for a supplementary video (see listing on page 10 of this leader's guide).
- Have participants research and present creation stories from other cultures and religions.
- Use one or more of the simple classroom science demonstrations described below.

## Classroom Science Demonstrations

The more "hands on" science you can bring into these sessions, the better. Because this material is intended for church school as well as day school use, the experiments do not require technical materials or advanced techniques. If you're concerned that your high schoolers will find them too simple, you could ask them to prepare and demonstrate the experiments to younger kids. You could also invite a high school science teacher to come and perform a more sophisticated experiment with your students.

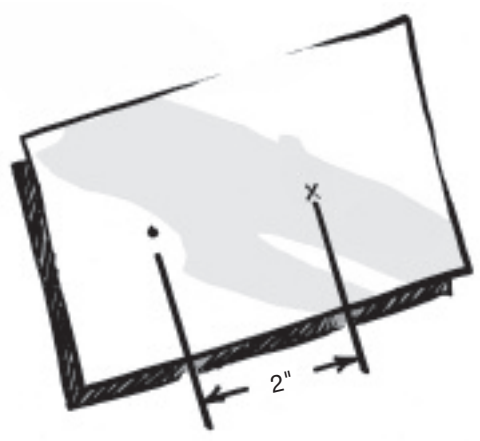
## Church School Tip

**If you're nearly out of time, choose one brief activity for the entire group. The first five activities listed take the least amount of time (as little as three minutes).**

Today's suggested experiments relate to light.

## 1. Blind Spots

On a 4 x 6 notecard, make a dot of about ¼ inch (0.625 cm) in diameter. About two inches (5 cm) to the right of the dot, make an X of about the same size.




Have participants hold the card about two feet away, focus intensely on the dot, and slowly move it toward their eyes. At some point the X will disappear. Ask your group why. (Because the human eye has no vision receptors where the optic nerve enters the eye.)

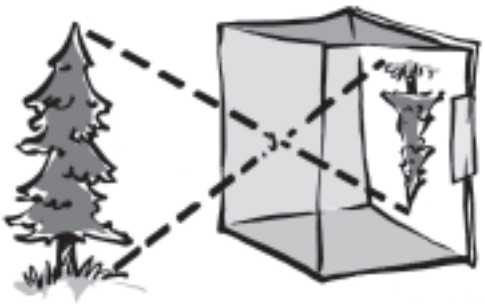
Next, have a participant stare straight ahead while another person holds up a piece of colored paper (about the size of an index card) a few feet to one side of the person's head, out of his range of vision, like this:

Have the person holding the colored paper move it very slowly forward until it just barely enters the peripheral vision of the person staring straight ahead. When that person first sees the card, she should say stop. The person moving the card should then ask her the color of the card. She will not be able to identify the color. (Try it with various colors, or tell the person you've changed the color when you really haven't.)

In effect, a color "blind spot" exists at the edges of our peripheral vision. Ask for an explanation. (Because of their position within the eye, the color receptors [cones] don't pick up objects that are in our peripheral vision; the rods [receptors that don't process color] are positioned to pick up objects in our peripheral vision.)

## 2. Pinhole Camera

This would be fun for high schoolers to make and demonstrate to younger children. Make a hole with a safety pin in the center of the bottom of a box that is open on one end. Stretch a piece of parchment paper over the open end of the box and fasten it with a rubber band. Darken the room and look through the hole to the outside at something that is brightly lit by the sun. The object you are looking at should appear upside down on the parchment paper screen.



Ask a student to explain how our eyes work in the same way. When light rays fall through the pupil and lens, an inverted image is projected on the retina of the eye. The portion of our brain that controls our sight turns the image the right way.

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### 3. Reflecting Telescope

Hand out copies of the "Reflecting Telescope" instructions (reproducible page 51) to any group members who want to try this at home in the evening.

## Looking Ahead to the Next Session

The next session focuses on what science has revealed to us about the wonders of God's creation. Read the participant newspaper and the leader's guide, and decide which activities to use.

You may want to

- visit a library and borrow science books with big pictures of the universe, molecular structures, and a wide variety of wildlife.
- arrange a field trip to a planetarium or observatory.
- invite one or two scientists from your congregation to attend the next session to discuss their work.

## If Participants Are Adults

Although you shouldn't need to change much of the session, here are a few considerations.

*Getting Started:* Instead of (or in addition to) the Human Bingo game, ask participants why they are interested in the course and what they hope to learn. Also ask if anyone has previously studied these topics. For example, someone who has a degree in a scientific field may be able to help you lead the discussion in session 2.

*Step 1:* Before reading from the participant newspaper, divide the group into pairs, and have them tell each other the creation story from memory. When everyone has had a turn, have them read the Genesis 1 account and see how well they did. What did they leave out? What did they think was in the account that wasn't actually there?

*Step 2:* The group might want to discuss the different kinds of creation stories in the Bible such as Job 26:7-14 (God created and upholds the earth); Matthew 13:31-32 (the kingdom of heaven is created and grows); 2 Corinthians 5:17 (we are new creations in Christ); and Revelation 5:11-14 (the whole creation praises God). Conclude by remembering that creation will be recreated in the new heaven and earth of Christ's coming kingdom.

*Step 3:* Provide several Bible concordances, and have small groups look up other passages that use the word *image* (such as Gen. 5:3; Gen. 9:6; Acts 17:29; 2 Cor. 4:4; Col. 1:15; Col. 3:10). How do these verses relate to being created in God's image?

Look more closely at Sabbath. Read the sidebar "Sabbath: The Day God Rested" (newspaper, p. 4) and have someone consult Exodus 20:8-11 and Deuteronomy 5:12-15. Talk about what the Sabbath is and what its purposes are.

*Step 4:* Singing a song of praise for God's creation may be a very appropriate way to end your session.