

# TrueU Leader's Guide: Does God Exist?

Michael N. Keas, PhD • Professor of the History and Philosophy of Science • <http://college.swbts.edu>  
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## TrueU: You Can Find Truth

Many Christians are failing to keep their faith after they begin college or enter the workforce. Focus on the Family's TrueU offers help. Create your own classroom dialogue with the TrueU DVDs, beginning with one of the most basic questions of life, "does God exist"? There are good reasons to think that God exists, and this leads to further knowledge of great importance. As Scripture says: "The fear of the LORD is the beginning of knowledge; fools despise wisdom and instruction" (Proverb 1:7).

## TrueU Leader's Guide

The Leader's Guide helps you to create engaging classroom experiences out of the ten 30-minute lessons on the DVD entitled *Does God Exist?* Note these features:

- Purchase the *Does God Exist* DVD through the [Focus on the Family Store](http://www.focusonthefamily.com) at Christianbook.com.
- Download this TrueU Leader's Guide from [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).
- Audience: High school juniors and seniors, college students, and adults.
- You may print and photocopy the handouts with discussion questions found in this document.
- Answers (or answer hints) are provided for most of the handout questions.
- The College Prep Leader's Guide (also download from [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu)) enables you to use *The Toughest Test in College* DVD documentary to introduce the entire TrueU program of instruction. *The Toughest Test in College* is a "bonus" feature on the *Does God Exist* DVD.

## About the Author of the Leader's Guide

Michael Keas earned a Ph.D. in the history of science from the University of Oklahoma after a year as a Fulbright Scholar in East Germany. He is Professor of the History and Philosophy of Science at the College at Southwestern in Fort Worth and an adjunct professor in Biola University's M.A. program in Science and Religion. His scholarly and curricular work has received funding from agencies such as the National Science Foundation and the American Council of Learned Societies. He is a Senior Fellow of Discovery Institute and has contributed articles to several scholarly journals and anthologies.

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## Leader's Guide to TrueU Lesson 1: Faith and Reason

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: Walking by Faith and Sight (questions 1-2)
- Chapter 3: Seeing the World Differently (questions 3-4)
- Chapter 4: The Reason for Reason (questions 5-7)

### Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Become familiar with navigating through the menu structure of the DVD *Does God Exist?*
- Print copies of the student handout.
- Handwrite your own comments in response to each question on your own copy of this handout as you preview the DVD in preparation for leading group discussion.
- Optional: Read William Lane Craig, [\*Reasonable Faith\*](#), 3<sup>rd</sup> edition (Crossway, 2008), p. 29-60.

### Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "We begin with some basic questions. What are faith and reason? Does everyone have faith in some worldview (basic beliefs about the world)? Is reason in harmony with Christian faith? Although we will begin crafting some answers today, the rest of the series will deepen our understanding remarkably."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1-2, and then discuss questions 1-2 in the handout.
    - Do this by clicking "play" under the "Faith and Reason" part of the menu and then pausing the DVD when "Seeing the World Differently" (chap. 3) appears.
  - Play "Seeing the World Differently" (chap. 3) and discuss questions 3-4 in the handout.
  - Play "The Reason for Reason" (chap. 4) and discuss questions 5-7 in the handout.
  - You may further answer question 5 this way: "Abduction is critical for worldview evaluation. It helps one determine which candidate for the *prime reality* (God or something else) best explains the effects we observe. Either God caused the universe to come into being, or some other prime reality candidate did the job. You can reduce uncertainty about which explanation is best if you find that more evidence is better (or only) explained by one of the competing hypotheses. Upon completing the TrueU series "Does God exist?" you might realize that you have far better reasons for believing in God's existence than his non-existence. In the light of a thorough search for evidence, God may be beyond reasonable doubt!"
- Conclusion: 2 minutes
  - While viewing the 15-second credits at the end of the lesson, tell your group that you will show a preview of the next lesson after which you will want someone to express what they hope to learn from the next lesson and how it relates to today's lesson.
  - This preview, called "up next," cannot be selected directly from the DVD chapter menu. If you lose your place on the DVD you may find this "up next" segment by reinitiating playback of the last chapter of lesson 1 and fast-forwarding to its end.
  - If no one wishes to say what one might learn in the next lesson, then provide your own one-sentence answer. Others may voice a thought after you express such an expectation.

## Handout for TrueU Lesson 1: Faith and Reason

1. How is faith best defined? Do even scientists have faith? How so?
2. Are you open to the possibility of scientific evidence that makes belief in God more reasonable than it might already be on the basis of your personal experience of God? Why?
3. Explain how everyone has a worldview (belief system), whether traditionally religious or not. A worldview is a personal philosophy about the nature of reality that answers questions such as:
  - What is the *prime reality* from which everything else originates?
  - What does it mean to be human?
  - What is right and wrong?
4. Theists think that a personal God is the *prime reality*. So evidence for God's existence supports a theistic worldview. Describe each worldview below by noting what is considered the *prime reality*.
  - Materialism
  - Theism
  - Deism
  - Pantheism
5. Which form of reasoning (below) does Dr. Meyer use most in evaluating whether God exists?
  - Deduction: Applying a general rule to a particular case to get a certain outcome.
  - Induction: Making specific observations that lead to a general conclusion (e.g., a natural law).
  - Abduction: Reasoning from effects (e.g., footprint on the moon) back to causes (an astronaut). Abduction occurs when you consider which hypothesis (cause) best explains the clues (effects). Historians, scientists, and detectives use abduction to infer which hypothetical sequence of events best explains current facts (e.g. crime scene clues). Abduction is known as "inference to the best explanation" or the "method of multiple competing hypotheses."
6. How does Dr. Meyer think that faith and reason are related? Do you agree or disagree? Why?
7. Someone tells you: "Christians shouldn't need reasons for believing in God. Christianity is based on faith." How would you respond?

## Leader's Guide to TrueU Lesson 2: Big Bang Cosmology, Part 1—The Finite Universe

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (question 1)
- Chapter 2: Taking God out of the Equation (question 2)
- Chapter 3: What's the Bigger Idea? (questions 3-5)

### Preparation

- Review the preparation steps listed for lesson one and apply them to this lesson.
- After you preview Dr. Meyer's presentation of this material on the DVD you may want to read Fred Heeren, *Show Me God: What the Message from Space Is Telling Us About God* (Daystar Productions, 1996), p. xvi-xix, 83-93. This is a fun and easy read compared to similar books about cosmology. Such background reading will strengthen your ability to lead the discussion.

### Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "Although atheism still represents a small minority opinion worldwide, it has enjoyed a recent modest boost in popularity due to the publications of the so-called 'new atheists.' These popular authors claim that science supports atheism. Has science really helped the atheists, or not? Today we begin addressing this topic by examining the branch of science called cosmology, which is the study of the universe as an entire integrated system."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapter 1, and then discuss question 1 in the handout.
    - Do this by clicking "play" under "Big Bang Cosmology Part 1" on the menu and pausing the DVD when "Taking God out of the Equation" (chap. 2) appears.
  - Play "Taking God out of the Equation" (chap. 2) and discuss question 2 in the handout.
  - Play "What's the Bigger Idea?" (chap. 3) and discuss questions 3-5 in the handout.
- Conclusion: 2 minutes
  - While viewing the 15-second credits at the end of the lesson, tell your group that you will show a preview of the next lesson after which you will want someone to express what they hope to learn from the next lesson and how it relates to today's lesson.
  - This preview, called "up next," cannot be selected directly from the DVD chapter menu.
  - If no one wishes to say what one might learn in the next lesson, then provide your own one-sentence answer. Others may voice a thought after you initiate such an expectation.

### Other Resources

- Fred Heeren, *Show Me God: What the Message from Space Is Telling Us About God* (Daystar Productions, 1996), p. xvi-xix, 83-93.
- William Lane Craig, *Reasonable Faith*, 3<sup>rd</sup> edition (Crossway, 2008), p. 111-130, 150-156, provides additional background knowledge for this lesson and the other cosmology lessons. W.L. Craig's book is more difficult to understand than Fred Heeren's book listed above.
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## Handout for TrueU Lesson 2: Big Bang Cosmology, Part 1—The Finite Universe

1. Where have you encountered the materialistic arguments of Richard Dawkins or the other “new atheists”? How has the new atheism affected you and your friends?
2. Most of the founders of modern science expressed allegiance to Christianity and found their faith and science to be mutually supportive. What prominent nineteenth-century view about cosmic time and space seemed to be inconsistent with the idea that an intelligent designer made the universe?
3. What did Hubble discover about the motion of galaxies and how did this imply, along with Einstein’s work, a beginning to the universe? In other words, if we trace cosmic history backward in an expanding universe, what do we learn?
4. Which premise of the following (modified) medieval cosmological argument for the existence of God has acquired strong support from recent scientific discoveries (Hubble, etc.)? How so?
  - Premise 1: Whatever begins to exist has a cause that is beyond itself.
  - Premise 2: The universe began to exist.
  - Conclusion: Therefore, the universe has a cause that is beyond itself.
5. How is the science-based conclusion of the cosmological argument (above) supportive of theism and challenging to atheism?

## Leader's Guide to TrueU Lesson 3: Big Bang Cosmology, Part 2—In the Beginning

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: The Steady State Theory (question 1)
- Chapter 3: The Oscillating Universe Theory (question 2)
- Chapters 4-5: Creation *Ex Nihilo* & In the Beginning (questions 3-4)

### Preparation

- Review the preparation steps listed for lesson one and apply them to this lesson.
- Study the answer key that immediately follows the student handout. Because of the complexity of today's topic, you may still generate useful discussion even if your students are given copies of the answer key. You could ask them to tell how the provided answer to a particular question makes sense to them.
- After you preview Dr. Meyer's presentation of this material on the DVD you may wish to read Fred Heeren, [\*Show Me God: What the Message from Space Is Telling Us About God\*](#) (Daystar Productions, 1996), p. 99-123.

### Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "Today we will study some of the non-God explanations of the universe in contrast with the view that God created the cosmos. Cosmology, remember, is the study of the origin and structure of the cosmos. Don't confuse *cosmology* with *cosmetology*, which attempts to enhance the beauty of the human body."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1 and 2, and then discuss question 1 in the handout.
    - Do this by clicking "play" under "Big Bang Cosmology Part 2" on the menu and pausing the DVD when "The Oscillating Universe Theory" (chap. 3) appears.
  - Play "The Oscillating Universe Theory" (chap. 3) and discuss question 2 in the handout.
  - Play "Creation *Ex Nihilo*" (chap. 4) and "In the Beginning" (chap. 5) and discuss questions 3-4 in the handout.
- Conclusion: 2 minutes
  - While running through the 15-second credits at the end of the lesson (to prepare to show the "up next" preview), tell your group: "Up to this point in our study of cosmology we've seen how the big bang, which is the cosmic beginning, is best explained by a *transcendent* cause. This means the cause of the material world is *beyond* space, time, and matter. The next lesson will show how a fine-tuned universe points to an *intelligent* cause of the universe."
  - Show the preview of the next lesson (the "up next" video clip).

### Other Resources

- William Lane Craig, [\*Reasonable Faith\*](#), 3<sup>rd</sup> edition (Crossway, 2008), p. 111-130, 150-156, provides additional background knowledge for this lesson and the other cosmology lessons. W.L. Craig's book is more difficult to understand than Fred Heeren's book mentioned earlier.
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## Handout for TrueU Lesson 3: Big Bang Cosmology, Part 2—In the Beginning

1. Why did cosmologist Sir Fred Hoyle oppose the big bang theory by advancing the steady state theory in which matter pops into existence countless times as the universe expands? What discovery confirmed the big bang and disconfirmed the steady state theory?
2. How did the oscillation theory offer another way to avoid a cosmic beginning? What evidence defeated this theory?
3. Does the big bang theory have theological implications? Do the arguments below explain why? Which worldview, if true, would best explain our scientific knowledge of the big bang event?

### *A Deductive Cosmological Argument*

- Premise 1: Whatever begins to exist has a cause that is beyond itself.
- Premise 2: The universe (space-time and matter-energy) began to exist.
- Conclusion: Therefore, the universe has a cause that is beyond itself.

### *An Inductive or Abductive (multiple competing worldviews) Cosmological Argument*

- P1: If a creator of the universe exists, then we would expect evidence of a cosmic beginning.
- P2: We have extensive scientific evidence of a cosmic beginning within big bang cosmology.
- Conclusion: Therefore, we have reason to think that a creator of the universe may exist. (Materialism and pantheism each offer an *inadequate cause* for the big bang event).

4. Is the big bang a causal theory—an account of what caused the universe to originate? Or is the big bang theory a description of the first *effect* rather than the first *cause*? Why is this issue important?

### Answer Key to TrueU Lesson 3

1. Why did cosmologist Sir Fred Hoyle oppose the big bang theory by advancing the steady state theory in which matter pops into existence countless times as the universe expands? What discovery confirmed the big bang and disconfirmed the steady state theory?

Fred Hoyle and many other cosmologists wished to support a theory that would avoid a cosmic beginning. Hoyle argued that we could have a *beginningless* expanding universe if the overall density of the universe remained steady despite the cosmic expansion that Hubble had discovered. He argued that the average density of the universe would remain the same if new matter spontaneously popped into existence at a rate that exactly matched the cosmic expansion.

A way to test the big bang and steady state theories soon arose. Scientists calculated that if the big bang theory were true, a certain amount of background radiation left over from the early dense universe should be present throughout space today. This radiation was discovered in 1965, and it exactly matched the sort of radiation (2.7° above absolute zero temperature) that must exist if the big bang theory were correct. The steady state theory was known to be inconsistent with this background radiation and even Hoyle gave up on his own theory after this and related discoveries.

2. How did the oscillation theory offer another way to avoid a cosmic beginning? What evidence defeated this theory?

The oscillation theory says that the current expansion of the universe is just one of infinitely many expansions alternating with contractions. This would mean that the beginning of the current stage of an oscillating universe would not be an ultimate beginning. However, scientists found that there is not enough mass in the universe to cause a gravitational collapse that would reverse the cosmic expansion. Only a tiny fraction of the mass required by the oscillation theory seems to exist. Numerous other pieces of evidence support the standard big bang theory and disconfirm (or only weakly support) all the competing hypotheses that postulate a beginningless cosmos.

3. Does the big bang theory have theological implications? Do the arguments below explain why? Which worldview, if true, would best explain our scientific knowledge of the big bang event?

#### *A Deductive Cosmological Argument*

- Premise 1: Whatever begins to exist has a cause that is beyond itself.
- Premise 2: The universe (space-time and matter-energy) began to exist.
- Conclusion: Therefore, the universe has a cause that is beyond itself.

The biblical creator-God is depicted as existing beyond the constraints of space, time, and matter. The deductive cosmological argument above offers scientific evidence for the second premise that the universe began to exist, and so was caused by something that is beyond space, time, and matter. Thus the Bible and science converge on the same answer to the worldview question: what is the prime reality from which everything comes? The answer: a spiritual (not material) being who is beyond the constraints of space-time.

#### *An Inductive or Abductive (multiple competing worldviews) Cosmological Argument*

- P1: If a creator of the universe exists, then we would expect evidence of a cosmic beginning.
- P2: We have extensive scientific evidence of a cosmic beginning within big bang cosmology.
- Conclusion: Therefore, we have reason to think that a creator of the universe may exist.  
(Materialism and pantheism each offer an *inadequate cause* for the big bang event).



The inductive cosmological argument above is especially impressive when formulated abductively (multiple competing hypotheses). Competing worldviews (theism, pantheism, and materialism) advance different candidates for the *prime reality* (God, mystical oneness, and matter-energy). We then ask which worldview, if true, would best explain our knowledge of the big bang event? Pantheism is the idea that divinity and matter are mystically “one” (so you can’t have god without matter). Thus the pantheistic god is not the sort of cause that is capable of producing the effect in question (the origin of space, time, and matter). Materialism has a similar problem of causal inadequacy regarding the origin of the universe. The big bang event seems to require a non-material cause because matter itself first comes into existence at the moment of the big bang.

Attributing the cause of the big bang to the laws of nature does not solve the problem because natural laws are simply descriptions of interactions of material parts *within* the universe including its space-time structure. The natural laws that we do know actually *originated* in the big bang and its aftermath. Something cannot cause itself. Natural laws are no exception to this rule. Physicist Stephen Hawking gave some support to this point when he (and George Ellis) wrote: “The results we have obtained support the idea that the universe began a finite time ago. However the actual point of creation, the singularity, is outside the scope of presently known laws of physics.”<sup>1</sup>

Stephen Hawking’s work on general relativity in the 1960s further supported big bang cosmology by suggesting that mass causes a curvature of space-time—a curvature that would approach infinity (no space or time) as the density of the universe approaches infinity (when you trace time backwards to a maximum cosmic contraction). This is the beginning point of the universe. At this “singularity” point there would be no time, space, or matter (matter cannot exist if there is no space). So it appears that the cause of this big bang event must not be subject to the limitations of space, matter, and time. This sounds like the biblical God. Many leading scientists have affirmed this, including Nobel Prize winners such as Arno Penzias and Charles Townes.

4. Is the big bang a causal theory—an account of what caused the universe to originate? Or is the big bang theory a description of the first *effect* rather than the first *cause*? Why is this issue important?

The big bang is *not* a causal theory—it is *not* an account of what caused the universe to originate. Rather, the big bang theory provides an evidence-based description of the first effect (and its aftermath). It is a theory of the first *effect*, not the first *cause*. This clarification is important because it accurately identifies what the scientific evidence for the big bang actually supports. This evidence enables humans to know that the universe had a beginning. As a strictly *scientific* theory, the big bang advances no claim about the cause of the universe.

What caused that beginning may be evaluated through comparing various worldviews and asking whether or not they offer a causal power that is capable of producing the big bang effect. Dr. Meyer makes the case that theism, if true, would explain the big bang effect better than any other major worldview. The more explanatory power that theism exhibits in such worldview comparisons, the more likely that it is true. Indeed, this investigative approach guides much of the TrueU series.

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<sup>1</sup> Stephen Hawking and George F. R. Ellis, *The Large Scale Structure of Space-Time*, Cambridge Monographs on Mathematical Physics (Cambridge University Press, 1973), 364.

## Leader's Guide to TrueU Lesson 4: Big Bang Cosmology, Part 3—A Finely Tuned Universe

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: A Finely-Tuned Machine (question 1)
- Chapter 3: What are the Chances? (question 2)
- Chapters 4-5: Speculative Extravaganza & Bread-Making-Making Machine (questions 3-5)

Preparation

- Decide whether to give your students a copy of today's answer key. As suggested earlier, you could ask them to tell how the provided answer to a particular question makes sense to them.
- After previewing the DVD lesson, consider studying Heeren's book, *Show Me God*, p. 197-251.

Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "In previous lessons we've seen how the big bang, which is the cosmic beginning, is best explained by a *transcendent* cause. This means the cause of the material world is beyond space, time, and matter. Today's lesson shows how a fine-tuned cosmos points to an *intelligent* cause of the universe. Cosmic fine-tuning refers to a series of physical constants that are "just right" for life. This evidence supports the scientific theory of intelligent design. Intelligent design theory has religious implications that are supportive of theism and challenging to other worldviews. The big bang and intelligent design theories are not religious viewpoints, but each of these scientific theories has religious implications that can be rationally evaluated through the method of comparing multiple competing hypotheses."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1 and 2, and then discuss question 1 in the handout.
    - Do this by clicking "play" under "Big Bang Cosmology Part 3" on the menu and pausing the DVD when "What are the Chances?" (chap. 3) appears.
  - Play "What are the Chances?" (chap. 3) and discuss question 2 in the handout.
  - Play "Speculative Extravaganza" & "Bread-Making-Making Machine" (chaps. 4-5) and discuss questions 3-5 in the handout.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Not only is the big bang beginning of the universe best explained by a cause that is beyond space, time and matter, but we also now realize that a fine-tuned cosmos points to an *intelligent* cause of the universe. This sounds a lot like Genesis 1:1—'In the beginning God created the heavens and the earth.' The next lesson introduces the mystery of life's origin on earth."
  - Show the preview of the next lesson (the "up next" video clip).

Other Resources

- William Lane Craig, *Reasonable Faith*, 3<sup>rd</sup> edition (Crossway, 2008), p. 111-156, provides additional background knowledge for this lesson and the other cosmology lessons. W.L. Craig's book is more difficult to understand than Fred Heeren's book mentioned earlier.
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## **Handout for TrueU Lesson 4: Big Bang Cosmology, Part 3—A Finely Tuned Universe**

1. How are the laws, constants, and initial conditions of nature fine-tuned to make life possible?
2. How does cosmic fine-tuning provide evidence for an intelligent cause of the universe?
3. How have scientists tried to explain away the fine-tuning of the universe in order to avoid the possibility of intelligent design?
4. Does intelligent design provide the best scientific explanation of a fine-tuned universe compared to its rival theories that depend exclusively upon chance and necessity? Why or why not?
5. Is resistance to intelligent design due primarily to the religious implications of this theory? Are there any scientific theories of cosmic origins that lack religious implications? If a theory has religious implications, does that mean that it should not be considered scientific at all?

## Answer Key to TrueU Lesson 4

### 1. How are the laws, constants, and initial conditions of nature fine-tuned to make life possible?

If the cosmic expansion rate (discovered by Hubble) were slightly faster or slower than what it actually was in the early universe, then life would not be possible. Here are some details:

#### Expansion Rate of the Universe

- If faster: no galaxies would form because matter would be spread out too thinly in space. (In the absence of galaxies and other specific structural cosmic features, life is impossible).
- If slower: the universe would collapse back on itself prior to star formation. (No stars would also mean that there would be no solar systems that could support life).

*Other Examples of Fine-Tuning (over 30 fine-tuned universal features are necessary for life)*

#### Gravitational Force Constant

- If larger: stars would be too hot and would burn up too quickly and unevenly for life support.
- If smaller: stars would remain so cool that nuclear fusion would never ignite, hence no heavy element production, which is necessary for life.

#### Electromagnetic Force Constant

- If larger: insufficient chemical bonding and elements more massive than boron would not exist.
- If smaller: insufficient chemical bonding, again, making life impossible.

#### Ratio of Electromagnetic Force to Gravitational Force

- If larger: short stellar life spans and uneven stellar burning (luminosities).
- If smaller: no heavy element production.

#### Strong Nuclear Force Constant

- If larger: no hydrogen and nuclei essential for life would be unstable.
- If smaller: no elements would exist other than hydrogen, thus making life impossible.

### 2. How does cosmic fine-tuning provide evidence for an intelligent cause of the universe?

The fine-tuning of the universe exhibits two features that lead us reliably to a design conclusion.

- Cosmic fine-tuning (dialing up those precise physical constants) is a *highly improbable event*.
- The result of fine-tuning is a *meaningful pattern* or *functional outcome*, in this case, life itself.

Getting one physical constant (e.g., the gravitational force constant) “just right” for life is vastly more unlikely by chance than dialing up arbitrarily the three numbers that open up a combination lock. When someone immediately opens a combination lock it indicates that this person had prior intelligent access to the correct code. Even more so, the existence of many “just right” physical constants for the possibility of life tells us that some intelligence selected those constants to construct a habitable (life-friendly) universe.

Biological life is a *functional outcome* made possible by the *highly improbable* fine-tuning of the universe. There are only a small number of ways to be alive biologically compared to the immense number of ways to be dead. Intelligence is the only cause we know by experience that is capable of generating highly improbable events that have such specific functional outcomes. In short, we have

an evidence-based scientific argument that fine-tuning points to a fine-tuner, not chance or other explanations that involve unintelligent processes.

Early in his career, Sir Fred Hoyle was resistant to the big bang theory and its cosmic beginning. Later, when confronted by the evidence for fine-tuning, he began to sound *theistic* in his comments about the laws of nature: “A common sense interpretation of the data suggests that a superintellect has monkeyed with physics, as well as with chemistry and biology.”<sup>2</sup>

For further study:

- Walter L. Bradley, “The Designed ‘Just So’ Universe,” Jan. 1999, [www.discovery.org/a/3681](http://www.discovery.org/a/3681)
- Robert C. Koons, “Post-Agnostic Science,” Nov. 1998, [www.discovery.org/a/142](http://www.discovery.org/a/142)

3. How have scientists tried to explain away the fine-tuning of the universe in order to avoid the possibility of intelligent design?

- Weak anthropic principle: Cosmic fine-tuning requires no scientific explanation because we would not be here to talk about it if it had not occurred. We *can only observe* a universe fine-tuned for life. Therefore, we should not be surprised by the fact that we observe a universe fine-tuned for life.
- Many worlds hypothesis (multiple universes): most popular explanation that denies design. There are enough universes to make the improbable fine-tuned features of our universe probable, and thus plausibly explained by *chance*.

For further study:

- Robin Collins, “The Fine-Tuning Design Argument,” Sept. 1998, [www.discovery.org/a/91](http://www.discovery.org/a/91)
- Illustra’s DVD “The Privileged Planet” and the book by this title: [www.privilegedplanet.com](http://www.privilegedplanet.com)

4. Does intelligent design provide the best scientific explanation of a fine-tuned universe compared to its rival theories that depend exclusively upon chance and necessity? Why or why not?

Weak anthropic principle (WAP): fine-tuning is a necessary condition for our observing it.

- Doesn’t explain why the necessary conditions of life in the cosmos are so improbable.
- Confuses a necessary condition with a cause. This is like saying that oxygen caused a fire to destroy a restaurant instead of allowing investigators to study the evidence to determine whether the fire was due to causes such as employee negligence.
  - WAP’s confusion of necessary conditions and relevant causes is in contrast to intelligent design theory, which avoids such errors in reasoning.
  - Design theorists follow the evidence where it leads to conclude that certain events can be explained best by intelligence (e.g., the origin of the text on this page or of fundamentally new types of organisms), while others are explained best by chance and necessity (e.g. the origin of a few similar species from a pre-existing large population of a single species due in part to the isolation of small groups on various islands).

Multiple universes: popular explanation that denies design and revives the *chance* hypothesis.

- Other universes are unobservable, making this a leap of faith in order to avoid design.
- A universe-creating machine would require its own fine-tuning, and thus an intelligent cause.

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<sup>2</sup> Fred Hoyle, “The Universe: Past and Present Reflections,” *Annual Review of Astronomy and Astrophysics*, 20 (1982), 16.

- The multiple universe theory (multiverse) breaks rules that our best scientific theories uphold:
    - Simpler theories are preferable over theories that multiply theoretical entities.
      - The multiple universes theory violates this rule in an unprecedented manner.
      - A designing intelligence (more than one not required) is a simple cause.
    - Draw conclusions based on *known* cause and effect patterns in the world.
      - When you have a finely tuned system that also produces a function, then you know that intelligence is involved.
      - We do not see chance or necessity (natural laws) doing such things, which serves to highlight how desperately speculative such cosmological theories are.
5. Is resistance to intelligent design due primarily to the religious implications of this theory? Are there any scientific theories of cosmic origins that lack religious implications? If a theory has religious implications, does that mean that it should not be considered scientific at all?

Recall that cosmic fine-tuning for life has two features that lead us reliably to a design conclusion.

- Cosmic fine-tuning (dialing up those precise physical constants) is a *highly improbable event*.
- The result of fine-tuning is a *meaningful pattern* or *functional outcome*, in this case, life itself.

In all other domains these two features—a *highly improbable event* coupled with a *meaningful pattern* or *functional outcome*—tell us that the thing in question was intelligently designed (e.g. the text on this page, a Roman coin, or a bicycle). Atheists like Richard Dawkins are open to detecting the intelligent design of humans and alien life forms, but only if such intelligent creatures evolved by unguided natural processes. So it appears that only certain kinds of designers (evolved ones) are acceptable to Dawkins, but others are not (especially God). Given that the big bang and fine-tuning together point to a super intelligence beyond space-time-matter, resistance to this sort of designer seems to be charged with religious (or anti-religious) bias.

The implications of something and the thing itself are not identical. A theory of cosmic origins like the (now discredited) oscillation theory was truly scientific in that it attempted to explain something about the cosmos (where it came from) by a causal story that was open to being tested. This theory had religious implications because it denied a cosmic beginning, which counts against certain worldviews, including theism. This theory might be receptive to certain religions that include the doctrine of reincarnation (some cycles of reincarnation might be in different sequential universes). The religious implications of the oscillation theory did not make it a religious doctrine. It was a scientific theory that was tested and found inadequate.

Although intelligent design (ID) has religious implications, the theory itself is not religious because it merely aims to detect whether the *apparent* design in nature is *real* design (the effect of an intelligent cause) or is simply the product of an undirected process. Creationism begins with a religious text and investigates how the findings of science can be reconciled to it. ID starts with the empirical evidence of nature and investigates what conclusions can be drawn from that evidence.

ID does not claim that *science* can identify whether the intelligent cause detected through investigation is supernatural. Although, individual scientists who are design theorists (such as Dr. Meyer) may take the conclusions of the scientific theory of design and integrate them into a larger philosophical and historical argument for the existence of the biblical God (the aim of TrueU), this does not negate the scientific character of the design inference from cosmic fine-tuning (or other domains of science). The charge that ID is “just religion” is a rhetorical strategy on the part of critics who wish to dismiss ID without addressing the merits of its arguments.

## Leader's Guide to TrueU Lesson 5: DNA by Design, Part 1—Biological Information

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: The Building Blocks of Life (question 1)
- Chapter 3: The Director of the Show (question 2)
- Chapter 4: What Does it All Mean? (questions 3-9)

Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Note how today's student handout contains within itself sufficient hints for answering the questions. Sometimes such hints for one question occur in the very next question.

Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "In previous lessons we discovered that the science of cosmology enables us to be confident that the universe had a beginning that was caused by a super intelligence. We learned that the universe has finely tuned physical laws that are friendly to life. But what specifically does it take to get life started in such a life-friendly universe? What is biological life and how does it originate? Today we begin this new investigation."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1 and 2, and then discuss question 1 in the handout.
    - Do this by clicking "play" under "DNA by Design Part 1" on the menu and pausing the DVD when "The Director of the Show" (chap. 3) appears.
  - Play "The Director of the Show" (chap. 3) and discuss question 2 in the handout.
  - Play "What Does it All Mean?" (chap. 4) and discuss questions 3-9 in the handout.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Our next lesson looks at the chances of getting life by a lucky accident. Is there enough good luck available in the material world to make life originate without any guiding intelligence?"
  - Show the preview of the next lesson (the "up next" video clip).

Other Resources

- For background knowledge you may read chapters 1-2 of Dr. Meyer's book: Stephen Meyer, [\*Signature in the Cell: DNA and the Evidence for Intelligent Design\*](#) (HarperOne, 2009).
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

*A note on handout questions 3-6:* The intelligent designer of this study guide typed all three sequences here: spspspspspsp, urnsdyskidfawqn, and "time and tide wait for no man." This illustrates a point: What we call "necessity, chance, and design" might (as theists say) all ultimately be undergirded by a supreme intelligent agent who manages the universe in a variety of ways (three of which are listed above). The "necessity" of natural laws, for a theist, is only relative "necessity" *here and now*, because God *freely* chose to create this universe and upholds it with a particular set of natural laws. Even so, for good reasons, we use the "necessity-chance-design" distinctions in science and everyday life. After we have built a scientific case for the sort of intelligent design described above, and use this design inference in a larger argument for theism, then we can return to "necessity" and "chance" as theists and show how we understand them differently than do atheists and adherents of other worldviews.

## Handout for TrueU Lesson 5: DNA by Design, Part 1—Biological Information

1. Although many leading nineteenth-century scientists thought that the cell was a “simple homogenous globule of plasm,”<sup>3</sup> evolutionary biologist Richard Dawkins has recently defined biology as “the study of complicated things that give the appearance of having been designed for a purpose.”<sup>4</sup> Describe the huge difference between non-living chemicals and a living cell.
2. What determines the three-dimensional shape of a protein, which gives it a specific life function? What is “sequence specificity” in regard to the amino acids that compose proteins? Include discussion of these facts about proteins:
  - DNA’s digital *code* directs the specific *sequencing* of amino acids in protein construction.
  - Precise amino acid *sequencing* determines protein *folding*.
  - *Folded* chains of amino acids form the *shapes* of proteins.
  - Protein *shapes* perform life-critical *functions*.
3. Which sequence below is complex (improbable) *and* matches an independent meaningful pattern? Contrast the *communication* function of a sentence with the *biological* function of a protein? What properties do they share?
  - spspspspspspspspspspspspspspspspspspsp
  - iurnsdyskidfawqznzklmfdfihseiklkskkdihekiqo
  - “Time and tide wait for no man” (a medieval proverb that means we can’t control time).
4. Note how the details below help answer the question above. Then answer the additional questions.
  - spspspspspspspspsp is highly specific (matches a pattern), but simple (follows a repetitive rule).
  - iurnsdyskidfawqznzklmfdfihseiklkskkdihekiqo is complex, but not specified (no pattern match).
  - “Time and tide wait for no man” is complex and specified (i.e., it’s *specified information*):
    - How is *specified* information also *functional* information? What’s a proverb’s function?
    - A gene is a DNA segment that codes for a protein. Proteins have life-support functions. How is a gene like the medieval proverb “time and tide wait for no man”?

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<sup>3</sup> T. H. Huxley, “On the physical basis of life,” *Fortnightly Review* 5 (1869):129-145. British spelling is “homogeneous.”

<sup>4</sup> Richard Dawkins, *The Blind Watchmaker* (New York: Norton, 1986), 1.



5. Explain how the three sequences above can be relabeled as follows (lesson 6 covers this more):
  - Low complexity + high specificity = simple order due to repetitive law. (consistent with necessity)
  - High complexity + low specificity = complex but arbitrary arrangement. (consistent with chance)
  - High complexity + high specificity = complex and functional. (only known cause is intelligent design)
  
6. Study these definitions and explain how the three sequences above are examples.
  - Necessity: Something that *had* to happen by a natural repetitive law. Also called deterministic.
  - Chance: Something that didn't have to happen, but *wasn't* chosen. It "just happened."
  - Design: Something that didn't have to happen, but *was* chosen purposefully.
  
7. What kind of cause, routinely seen in operation today, is always involved in the appearance of new information (and its associated functional outcome)? What implication does this have for the origin of DNA, which carries the information for building the proteins critical for cellular functions?
  
  
  
  
  
  
  
  
  
  
8. Is the argument for intelligent design based on ignorance or on what we know about causes today?
  
  
  
  
  
  
  
  
  
  
9. *Complexity* can be expressed as how improbable it would be to get that same thing a second time without intelligent guidance. *Specificity* is the match between the thing and an independent meaningful pattern (one with a functional result). An ordinary mountain face is complex, but lacks specificity. A Mt. Rushmore presidential face is both highly complex and specified. What is the only adequate cause of highly complex and specified effects such as Mt. Rushmore and DNA's code?

## Leader's Guide to TrueU Lesson 6: DNA by Design, Part 2—Doing the Math

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (question 1)
- Chapter 2: Taking Your Chances (questions 2-6)
- Chapter 3: Climbing Out of the Hole (question 7)
- Chapter 4: Getting Organized (questions 8-9)

Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Note how the student handout contains within itself sufficient hints for answering the questions.

Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "In our last lesson we began to examine what it takes for the origin of life to happen? Today we continue this investigation by looking at the chances of getting life accidentally. Is there enough good luck in the material world to make life originate without any guiding intelligence?"
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapter 1 and then discuss question 1 in the handout.
    - Do this by clicking "play" under "DNA by Design Part 2" on the menu and pausing the DVD when "Taking Your Chances" (chap. 2) appears.
  - Play "Taking Your Chances" (chap. 2) and discuss questions 2-6 in the handout.
  - Play "Climbing Out of the Hole" (chap. 3) and discuss question 7 in the handout.
  - Play "Getting Organized" (chap. 4) and discuss questions 8-9 in the handout.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Our next lesson looks at the chances of getting life by a lucky accident. Is there enough good luck available in the material world to make life originate without any guiding intelligence?"
  - Show the preview of the next lesson (the "up next" video clip).

Other Resources

- For background knowledge you may read chapters 8-11 of Dr. Meyer's book: Stephen Meyer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (HarperOne, 2009).
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).



functions. In other words, we can eliminate chance as a reasonable explanation for the unguided origin of just one protein that is 150 amino acids long, given all the time (15 billion years, say most scientists) and material interactions possible within the known universe.

5. Using the points below, discuss how common (or rare) functional sequences (i.e. proteins that could do something useful in a living system) are among all the possible combinations of amino acids (the building blocks of proteins).
  - Molecular biologist Doug Axe estimates that the ratio of functional to non-functional amino acid sequences is about 1 to  $10^{74}$ .
  - This estimate is based on his studies of functional folds among sequences that are 150 amino acids long.
  
6. Using the points below, discuss how likely is it that life—or even a single protein—came into existence by mere chance.
  - Based on Axe’s work and several other considerations that offer additional probabilistic hurdles, the chance of getting just one protein without intelligent guidance is far beyond the probabilistic resources of the entire known universe.
  - The leap from just one protein to life is even greater. Scientists have estimated that it takes at least 250 proteins (and much else) to construct a minimally complex single-celled organism.
  - Virtually all origin-of-life specialists have given up on “chance alone” explanations for life’s origin.
  
7. What is wrong with using “prebiotic natural selection” to overcome the great odds against the origin of life? Use these points below in your answer:
  - “Prebiotic” means before life began.
  - “Natural selection” means organisms that have favorable traits in a certain environment will tend to survive better than other competing organisms.
  - “Begging the question” is a logical mistake that is illustrated by the story of “going home to get a ladder to get out of a whole.”
  
8. What is the point of Dr. Meyer’s illustration of spelling words using magnetic letters on a refrigerator? Does magnetic attraction cause a particular sentence to appear on the refrigerator? What is the “medium” and what is the “message” in this case?
  
9. How is DNA’s genetic code (similar to refrigerator sentences) “spelled out” by a sequence of molecules whose arrangement is not determined by the forces of chemical attraction? What serious flaw in the self-organization theory of life’s origin does this identify?

## Leader's Guide to TrueU Lesson 7: DNA by Design, Part 3—Information and Intelligence

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: What's the Best Explanation? (questions 1-3)
- Chapter 3: Processing the Information (question 4)
- Chapter 4: What's all This Junk For? (question 4)
- Chapter 5: Let's Break Some Rules (questions 5-8)

### Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Study the answer key to the student handout.

### Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "In our last lesson we examined the chances of getting life accidentally or by means of a natural law. Both of these alternatives failed. Today we will see why intelligent design is the best explanation for the origin of life."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1 and 2, and then discuss questions 1-3 in the handout.
    - Do this by clicking "play" under "DNA by Design Part 3" on the menu and pausing the DVD when "Processing the Information" (chap. 3) appears.
  - Play "Processing the Information" (chap. 3) and "What's all This Junk For?" (chap. 4), and then discuss question 4 in the handout.
  - Play "Let's Break Some Rules" (chap. 5) and discuss questions 5-8 in the handout.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Our next lesson summarizes where we are in the series and explains why it matters. We will see how the study of biological information encoded in DNA helps us to eliminate false worldviews and identify one that best explains all of the evidence we have studied."
  - Show the preview of the next lesson (the "up next" video clip).

### Other Resources

- For background knowledge you may read chapters 15-16 of Dr. Meyer's book: Stephen Meyer, [\*Signature in the Cell: DNA and the Evidence for Intelligent Design\*](#) (HarperOne, 2009).
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## Handout for TrueU Lesson 7: DNA by Design, Part 3—Information and Intelligence

1. What makes an explanation about a past event the “best” explanation?
2. What is the only cause operating today that produces new functional information, such as the digital code that directs the assembly of airplane parts that support the function of flying? How does this observation help identify intelligent design as the best explanation of the origin of DNA’s digital code, which directs the assembly of the cellular components needed for life?
3. What two features, when they are both present in a natural object or event, reliably enable us to detect the work of intelligent design?
4. Why did most scientists, until recently, believe that much of DNA is useless “junk”? What sorts of functions (similar to computer software) do we now know that such DNA has?
5. What is “methodological naturalism”? Does it limit or enhance a scientist’s ability to find the truth about life’s origin? Why?
6. How might you discuss intelligent design with someone who embraces naturalism (materialism)?
7. Which pattern (below) in a complex thing reliably leads us to conclude that it was designed?
  - Fabrication: A pattern we *impose* on an object or event (it’s *not objectively* independent).
  - Specification: An *independent* meaningful pattern (Mt. Rushmore matches presidential faces).Suppose you shoot an arrow thoughtlessly into a wall. Which pattern above is illustrated by painting a target around wherever your arrow hit and saying to a friend: “look at the effect of my archery skill.” Which pattern above would be illustrated if your friend removed your arrow and then shot it into the exact same spot from 50 feet away?
8. How does this lesson strengthen the argument for the intelligent design of life (and by implication, God’s existence)? Why do you think many people seem determined to explain life’s origin without reference to the kind of intelligent designer whom theists worship, namely a God who interacts in special ways with humans?

## Answer Key to TrueU Lesson 7

1. What makes an explanation about a past event the “best” explanation?

It should involve a cause that is known by experience today to produce the kind of effect under investigation. If all the rival theories utilize causes that are known to be inadequate for the job, then this further identifies the remaining theory as “best.”

2. What is the only cause operating today that produces new functional information, such as the digital code that directs the assembly of airplane parts that support the function of flying? How does this observation help identify intelligent design as the best explanation of the origin of DNA’s digital code, which directs the assembly of the cellular components needed for life?

“The creation of new information is habitually associated with conscious activity,” so wrote information theorist Henry Quastler.<sup>5</sup> Conscious activity is intelligent design. Intelligence is the only cause known by experience today to produce the kind of effect (functional information which is necessary for the origin of life) under investigation. All the rival theories utilize causes (random events or repetitious events determined by natural laws) that are known to be inadequate for the job, and so this further identifies intelligent design theory as the best explanation of life’s origin.

3. What two features, when they are both present in a natural object or event, reliably enable us to detect the work of intelligent design?

*Complexity and specificity.* *Complexity* can be expressed as how improbable it would be to get that same thing a second time by an unintelligent process. *Specificity* refers to the match between the thing in question and a specific independent meaningful pattern or functional outcome. An ordinary mountain face is complex, but lacks specificity. A presidential mountain face on Mount Rushmore is both highly complex and highly specified. DNA’s code, like the Mount Rushmore presidential faces, is highly complex and highly specified, and thus it must have been intelligently designed.

4. Why did most scientists, until recently, believe that much of DNA is useless “junk”? What sorts of functions (similar to computer software) do we now know that such DNA has?

Darwinists expected the trial and error process of natural selection acting on random mutations to leave behind in the genome a junkyard full of useless DNA segments, among which only a small percentage of DNA would code for something functional, such as proteins. This prediction seemed to be confirmed until recently when scientists began to find unmistakable evidence of numerous functions for so-called “junk DNA.” Much of what was formerly thought to be junk in “non-coding regions” is now known to have function. Some of its functions like the operating system of a computer (but more sophisticated than human technology). For instance, so-called “junk DNA” governs *when* the protein-encoding parts of DNA are to be accessed, *where* the constructed proteins are to be used, and more.

Information processing systems found both in computers and cells include:

- Nested coding of information
- Files within folders hierarchical filing system
- Distributed storage and retrieval informational modules
- Operating systems such as Microsoft’s “Windows” and the Macintosh OS.

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<sup>5</sup> Henry Quastler, *The Emergence of Biological Organization* (New Haven: Yale University Press, 1964), 16.

5. What is “methodological naturalism”? Does it limit or enhance a scientist’s ability to find the truth about life’s origin? Why?

Methodological naturalism may be described as the idea that intelligent causes should not be considered in scientific inquiry because only material causes are allowed. Richard Dawkins revealed in his interview with Ben Stein on the movie *Expelled* ([www.themovieexpelled.com](http://www.themovieexpelled.com)) that he would be willing to break this methodological rule in origin of life studies, but only if (previously-evolved) alien intelligent life is the intelligent designer, rather than God. Ben Stein then commented in *Expelled*: “So Professor Dawkins was not against intelligent design, just certain types of designers, such as God.”

A further irony here is that design theorists, *as scientists*, only infer the *operation* of intelligence, *not* the *identity* of the designing intelligence. Many design theorists go further than this, but only by using additional fields of knowledge beyond science, such as human history (e.g., evidence for Jesus’ resurrection). Methodological naturalism artificially *limits* a scientist’s ability to find the truth about origins. The reason for this is because it limits the possible answers to the question even before investigation begins. The biased approach of methodological naturalism is a different issue than whether one concludes, after inquiry, that material causes were responsible for the effects in many cases (e.g., microevolution, or limited biological change), but not in other cases (e.g., origin of the universe and life). The latter approach, simply following the evidence where it leads, is what critics of Darwinism and critics of methodological naturalism are attempting.

6. How might you discuss intelligent design with someone who embraces naturalism (materialism)?

Use the key points in the lesson to engage others in conversation about design and naturalism.

7. Which pattern (below) in a complex thing reliably leads us to conclude that it was designed?

- **Fabrication:** A pattern we *impose* on an object or event (it’s *not objectively* independent).
- **Specification:** An *independent* meaningful pattern (Mt. Rushmore matches presidential faces).

Suppose you shoot an arrow thoughtlessly into a wall. Which pattern above is illustrated by painting a target around wherever your arrow hit and saying to a friend: “look at the effect of my archery skill.” Which pattern above would be illustrated if your friend removed your arrow and then shot it into the exact same spot from 50 feet away?

Painting a target around wherever your arrow hit is *fabrication* because you *imposed* this pattern of concentric circles around your arrow’s arbitrary impact point. Such a pattern is *not independent* of the event in question (the arrow’s impact). Legitimate targets, ones that reliably indicate archery skill, are set up before an arrow takes flight and thus are *independent* of the event of arrow shooting. Such would be the case in the scenario in which a friend manages to shoot an arrow into the exact pre-specified point where your arrow had previously landed. This would reliably indicate archery skill, which is a kind of intelligent design.

8. How does this lesson strengthen the argument for the intelligent design of life (and by implication, God’s existence)? Why do you think many people seem determined to explain life’s origin without reference to the kind of intelligent designer whom theists worship, namely a God who interacts in special ways with humans?

This is a summary question that could be answered in many different ways.



## Leader's Guide to TrueU Lesson 8: DNA by Design, Part 4—Return of the God Hypothesis

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: Those Who Have Gone Before Us (question 1)
- Chapter 3: Let's Review (question 1)
- Chapter 4: Some Additional Evidence (questions 2-3)
- Chapter 5: The Return of the God Hypothesis (question 1 again)

Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Note how this lesson contains much review and sets what we have done in a larger context.

Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "Today our lesson summarizes where we are in the series and explains why it matters. We will see how the study of DNA, the fossil record, and other areas of science, when seen as an integrated whole, helps us to eliminate false worldviews and identify one (theism) as the best explanation of the evidence."
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1-3, and then discuss question 1 in the handout.
    - Do this by clicking "play" under "DNA by Design Part 4" on the menu and pausing the DVD when "Some Additional Evidence" (chap. 4) appears.
  - Play "Some Additional Evidence" (chap. 4) and discuss questions 2-3 in the handout.
  - Play "The Return of the God Hypothesis" (chap. 5) and discuss question 1 again.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Our next lesson turns to a major new topic: morality. We will investigate which worldview best makes sense of our moral experience."
  - Show the preview of the next lesson (the "up next" video clip).

Other Resources

- For background knowledge you may read chapters 17-20 of Dr. Meyer's book: Stephen Meyer, [\*Signature in the Cell: DNA and the Evidence for Intelligent Design\*](#) (HarperOne, 2009).
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## **Handout for TrueU Lesson 8: DNA by Design, Part 4—Return of the God Hypothesis**

1. Review the evidence that points to theism as the best explanation for the origin of the universe and life. How might you find the courage to discuss this evidence, or at least dissent from naturalism, within an academic setting overwhelmingly committed to atheism and scientific materialism?
2. What is the Cambrian explosion of animal life? How does this episode in earth history, and other sudden appearances of many radically new life forms challenge both deism and Darwin's idea that all life evolved from a single common ancestor?
3. How are tiny bacterial rotary engines and many other molecular devices found in living cells best described as "functionally integrated high tech systems"? How does this evidence, alongside the scientific discoveries discussed earlier, call for a highly reasonable "return of the God hypothesis" in our time—echoing, with amplification, the confident voices of early modern scientists who believed in God?

## Leader's Guide to TrueU Lesson 9:

### Moral Necessity of Theism, Part 1—God is the Best Explanation of Moral Experience

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: Who Decides What's Right and Wrong (questions 1-4)
- Chapter 3: Do I Have a Choice? (question 5)
- Chapter 4: What's the Difference? (questions 6-8)

#### Preparation

- Preview Dr. Meyer's lesson on the DVD.
- Study the student handout to become familiar with how the answers provided for the questions make sense in light of Dr. Meyer's presentation. You might want students to read portions of the handout and discuss each item in groups of two or three, and then as a whole group.

#### Lesson Plan: 53-63 minutes

- Introduction: 1 minute
  - Say something like this: "Today we shall see how the existence of God provides the best way to make sense of the objective and meaningful system of morality that people generally experience."
  - Have a student read the *Thesis of Today's Lesson* (top of the handout).
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1-2, and then discuss questions 1-4 in the handout.
    - Do this by clicking "play" under "Ethics & Morality Part 1" on the menu and pausing the DVD when "Do I Have a Choice?" (chap. 3) appears.
  - Play "Do I Have a Choice?" (chap. 3) and discuss questions 2-3 in the handout.
  - Play "What's the Difference?" (chap. 4) and discuss questions 6-8.
- Conclusion: 2 minutes
  - While running through the end credits (to show "up next"), say: "Our next lesson will show how theism makes better sense of morality than the main alternative naturalistic explanations that are offered by our society: relativism and evolutionary ethics."
  - Show the preview of the next lesson (the "up next" video clip).

#### Other Resources

- For background knowledge you may read Mark D. Linville's "moral argument" chapter in William Lane Craig and J. P. Moreland, eds., [\*The Blackwell Companion to Natural Theology\*](#) (West Sussex, UK: Wiley-Blackwell, 2009). Leading philosophers provide relevant arguments in light of state-of-the-art philosophical and scientific discussions. This anthology offers lengthy essays on all the major arguments for God's existence, including the moral, cosmological, and teleological—the principal arguments in TrueU DVD set #1.
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).

## Handout for TrueU Lesson 9:

### Moral Necessity of Theism, Part 1—God is the Best Explanation of Moral Experience

*Thesis of Today's Lesson:* The existence of God provides the only coherent explanation for the conditions of an objective and meaningful system of morality. Moreover, because the actions of all people reveal that they presuppose an objective and meaningful moral code, only a belief in God's existence allows people to live consistently with their moral belief system.

1. "If God is dead then all things are permissible" (attributed to Fyodor Dostoevsky)<sup>6</sup>.  
How does the argument below provide rational support for theism (belief in the existence of God)?
  - If God is dead (does not exist) then all things are permissible.
  - People do not act as though they believed that all things were permissible.
  - Therefore, people are living as though God were not dead.
  
2. What makes moral reasoning possible (such as this argument)? Discuss the answer below.  
Premise 1: Killing a baby is wrong.  
Premise 2: Partial-birth abortion kills a baby.  
Conclusion: Partial-birth abortion is wrong.
  - An argument about morality (moral reasoning) typically has...
    - A general moral statement (killing a baby is wrong).
    - A claim about the factual status of an action (partial-birth abortion kills a baby).
    - A moral conclusion about a specific action (partial-birth abortion is wrong).
  - Moral reasoning of this sort is only possible if there is an objective basis for moral statements such as "killing a baby is wrong."
  - Note: A moral statement is a statement asserting that an action is right or wrong (moral or immoral) or that a person or motive is good or bad. (Moral statements are about what "ought to be"—not just what "is").
  
3. What is the difference between claims about what "is" and what "ought to be"?  
How does the abortion argument above illustrate the difference?  
Why is this distinction important?

*Discuss the answer to these questions using the outline below:*

- While the second premise in the partial-birth abortion argument is a factual claim about what "is" (partial-birth abortion kills a baby), the first premise is an ethical principle about what "ought" to be avoided (killing a baby is wrong). *Is* and *ought* are quite different!

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<sup>6</sup> This basic idea is found in Dostoevsky's novel *Brothers Karamazov*. The source of this quotation is uncertain.

- It is illogical to leap from a factual claim (partial-birth abortion kills a baby) to a moral conclusion (partial-birth abortion is wrong) without the help of an appropriate moral premise (killing a baby is wrong).
- Even if we get the logic right, it is unreasonable to conclude that partial-birth abortion is wrong through the above argument if we fail to have good reasons for accepting both the premises.
- But if God is dead, then there is no objective basis for accepting any general moral rules (what *ought* to be) including the premise “killing a baby is wrong.”
- Without God the gulf between “is” & “ought” cannot be reasonably crossed. In biblical ethics, God’s character and design plan (what “is”) provide reasons for what “ought” to be (morality).

**Questions 4-6 focus on three conditions necessary for objective and meaningful morality.**  
 Aim: evaluate how well the major worldviews account for these necessary conditions (or don’t).

4. Which worldview provides a sufficient basis for an **objective transcendental standard**, which is **necessary condition #1** for the meaningful morality that humans generally experience?

*How does the answer to this question outlined below make sense? Are you convinced? Why?*

- Theists typically argue that God’s moral standards for humanity are *not* arbitrary (*not* lacking good reasons), but are rooted in God’s character and are appropriate for the sort of creature that God designed humans to be. On this view, morality is based on a standard that is transcendental (above the various practices of human societies). Proper functioning of our moral capabilities is only possible when we live the moral life God’s way. Morality is objective, not subjective.
- Pantheism lacks an objective transcendental moral standard, and thus fails to provide a necessary condition for the sort of objective morality that we experience. This is so because pantheism denies all dualisms (fundamental distinctions), including “good and evil.”
- Naturalism denies the existence of an objective transcendental moral standard. Lesson ten will give the details, but here is a statement by two prominent naturalists to make the point here: “Morality... is merely an adaptation put in place to further our reproductive ends.... In an important sense, ethics as we understand it is an illusion fobbed off on us by our genes to get us to cooperate.” Michael Ruse and E. O. Wilson.<sup>7</sup> What are these Darwinists telling us?

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<sup>7</sup> Michael Ruse and E. O. Wilson, “The Evolution of Ethics,” *New Scientist* 108 (October 17, 1985):50–52.

5. Why is **freedom of choice a necessary condition (#2)** for the objective morality that humans generally experience, and which worldview best supports such human freedom?

*How does the answer to this question outlined below make sense? Are you convinced? Why?*

- Humans generally experience an objective morality (example: murder is objectively wrong and so we *should not* do it, rather than being merely a subjective “I prefer not to murder people.”)
- Such generally experienced objective morality is impossible without the existence of a genuine choice to be moral (not murder people) or to be immoral (murder people), because you can only be morally responsible for actions about which you have a choice (animals are never guilty of murder).
- So, next we must examine which worldview adequately supports human freedom of choice.
- Dr. Meyer focuses on naturalism--the most popular non-theistic option in the western world.
  - Consistent naturalists deny free will, showing that naturalism has no basis for the existence of objective morality.
    - “Naturalistic evolution has clear consequences that Charles Darwin understood perfectly... [including the idea that] human free will is nonexistent.... Free will is a disastrous and mean social myth. Using free will as an excuse, we condone a vicious attitude of revenge toward anyone who does wrong in our society.”  
William Provine, Distinguished University Professor, Cornell University.<sup>8</sup>
      - Provine thinks it is *cruel* to punish criminals because their evolutionary histories made them criminals (they are not responsible for their actions).
      - What is inconsistent about this argument coming from the mouth of a naturalist (Provine is an atheist who appeared in the movie *Expelled*)?
      - Why has this diminished responsibility plea sometimes succeeded in the American courtroom since 1924 (read the 1924 quotation below)?

“Is Dickie Loeb to blame because of the infinite forces that conspired to work within him ages before he was born? Is he to blame for the forces that made him imperfect? ... It may be defective nerves, defective heart, defective endocrine glands. ... We know that every human being is a product of the heredity behind him and the environment around him. We know that under stress and strain you might act one way, I another, and Dickie Loeb another.”<sup>9</sup> This is a quotation of attorney Clarence Darrow in a 1924 article about the Leopold-Loeb murder trial (just before Darrow’s role in the 1925 Scopes trial).

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<sup>8</sup> William Provine, abstract of “Evolution: Free will and punishment and meaning in life,” delivered on February 12, 1998, Darwin Day Archives, <http://eeb.bio.utk.edu/darwin/Archives/1998ProvineAbstract.htm> (accessed June 9, 2010).

<sup>9</sup> Associated Press, “Darrow declares murder of Franks boy was aimless: Only explanation is mental sickness, defence counsel argues,” *The Montreal Gazette*, August 25, 1924, p. 24.

6. **Necessary condition #3: “A reason to believe in the intrinsic dignity of each individual human and in a qualitative distinction between humans and animals.”** How is this statement a necessary condition for the objective morality that humans generally experience, and which worldview best supports it?

*How does the answer to this question outlined below make sense? Fill in more details.*

- What conclusion comes from a denial of a qualitative distinction between humans and animals?
    - There is no qualitative difference between humans and animals.
    - We kill animals when it suits our purposes or when they are no longer useful.
    - So it is okay to kill humans when it serves our purposes or when they are not useful.
  
  - Give examples of 20<sup>th</sup>-century governments that killed certain people who were considered no longer useful to society. Which worldviews supported such atrocities? How does this show that certain worldviews do not support the third necessary condition for objective morality?
  
  - In contrast, explain how the Judeo-Christian tradition supports the intrinsic dignity of each individual human and a qualitative distinction between humans and animals.
7. Restate in your own words the three conditions necessary for objective morality listed below:
- An objective transcendental standard.
  - Human freedom of choice.
  - A reason to believe in the intrinsic dignity of the individual and in a qualitative distinction between humans and animals.
8. Are you convinced that theism (God’s existence) provides the only coherent explanation for these three necessary conditions for objective morality? If not, would you at least agree that theism is a better explanation of these three conditions than the major rival worldviews? Why or why not?

## Leader's Guide to TrueU Lesson 10: Moral Necessity of Theism, Part 2—Failure of Naturalistic Objections

Correlation between the DVD chapters of this lesson and the questions in the student handout.

- Chapter 1: Beginning of the Lesson (no questions in the handout pertain to this chapter)
- Chapter 2: Is it All Just Relative? (questions 1-4)
- Chapter 3: What Does Your Instinct Tell You? (question 5)
- Chapter 4: Does God Exist? (questions 6-10)

### Preparation

- Today's lesson takes 15-20 minutes more time compared to other lessons if you do the series conclusion (last page of the handout). Perhaps plan a pizza party to entice students to stay longer. Or you could divide this lesson into two sessions and allow more discussion.
- Study the student handout to become familiar with how the answers provided for the questions make sense in light of Dr. Meyer's presentation. You might want students to read portions of the handout and discuss each item in groups of two or three, and then as a whole group. Some of the answers are not in the student handout, but in the answer key.

Lesson Plan: 53-63 minutes (plus 15-20 additional minutes for an optional series conclusion)

- Introduction: 1 minute
  - Say something like this: "Last time we discovered that theism well explains our moral experience. Today we will show that theism makes better sense of morality than the main alternative naturalistic explanations: relativism and evolutionary ethics."
  - Have a student read the *Thesis of Today's Lesson* (top of the handout).
- 30 minutes of DVD and 20-30 minutes of discussion using the handout.
  - Play DVD chapters 1-2, and then discuss questions 1-5 in the handout.
    - Do this by clicking "play" under "Ethics & Morality Part 2" on the menu and pausing the DVD when "What Does Your Instinct Tell You?" (chap. 3) appears.
  - Play "What Does Your Instinct Tell You?" (chap. 3) & discuss handout questions 6-10.
  - Play "Does God Exist?" (chap. 4) & discuss the 5 questions on the conclusion handout.
- Conclusion: 2 minutes (plus 15-20 additional minutes for an optional series conclusion)
  - Today's conclusion could take an additional 15-20 minutes if you cover the optional series conclusion (the last page of the student handout).
  - Say something like this: "The scientific and moral evidence for God's existence is overwhelming, but the next reasonable question to ask is 'who is this God?' Is there historical evidence that the Bible is a reliable guide to who God is? That is the subject of TrueU DVD set #2, which we plan to study later."
  - Return to the DVD main menu, select "promos," and then show the preview of TrueU DVD set #2: *Is the Bible Reliable?* (this link at the bottom of the screen).

### Other Resources

- For background knowledge you may read Mark D. Linville's "moral argument" chapter in William Lane Craig and J. P. Moreland, eds., *The Blackwell Companion to Natural Theology* (West Sussex, UK: Wiley-Blackwell, 2009). Also consult Francis Beckwith and Gregory Koukl, *Relativism: Feet Firmly Planted in Mid-Air* (Grand Rapids, MI: Baker Books, 1998). This book provides a rigorous critique of moral relativism. Visit Greg Koukl's website [www.str.org](http://www.str.org). Koukl is a terrific communicator and apologist.
- Additional resources for this lesson may be found through the "additional resources" link of [www.scienceandgod.org/trueu](http://www.scienceandgod.org/trueu).



## Handout for TrueU Lesson 10: Moral Necessity of Theism, Part 2—Failure of Naturalistic Objections

### *Thesis of Today's Lesson:*

There are two naturalistic objections to the moral argument for God's existence. Both objections fail!

- Moral relativism: Objective ethical values do not exist. What appear to be objective ethical values are just subjective preferences that are relative to individuals or social groups.
- Evolutionary ethics: Objective ethical values originated from animal evolution. Ethical values are those ways of thinking and acting that have promoted survival within evolutionary history.

1. Review the four points of the argument for moral relativism in order to appreciate it.

- 1.1. If different people make different ethical judgments, then different people have different ethical values.
- 1.2. Different people make different ethical judgments.
- 1.3. Therefore, different people have different ethical values.
- 1.4. Therefore, ethical principles are relative to persons or groups.

2. How does the argument for moral relativism fail logically? *Discuss the answer provided below.*

- Just because *people disagree* about what they *believe* is right and wrong (statement 1.3), this does not necessarily mean that objective moral principles do not exist (conclusion 1.4). To argue that conclusion 1.4 necessarily follows from statement 1.3 is to commit the logical fallacy known as *non sequitur* (a conclusion that does not follow logically from the premises or evidence). While the subject of sentence 1.3 is “people,” there is a shift in sentence 1.4 to a different subject, namely, “ethical principles.” It is a logical error to leap from 1.3 to 1.4.
- We would not accept such an illogical leap to a conclusion in any other realm, so why should we accept it here?
- Furthermore, there are good reasons to affirm commonly accepted *general* moral principles such as “don't harm people,” despite the fact the people often disagree about *specific* cases of harming people, such as in a war that may or may not be justified.

3. How does moral relativism fail to make sense of our moral experience?

*Discuss and fill in the details of the three parts of the answer outlined below.*

- Moral debates seem to be about something important.
- Errors and progress in ethical history seem possible.
- Our lives show the impossibility of living relativism consistently. Support this point with examples of “things relativists can't do” (yet we seem to experience such things routinely).
  - Can't accuse others of \_\_\_\_\_.
  - Can't accept praise for a moral act (why, according to relativism?)
  - Can't improve their \_\_\_\_\_.
  - Can't hold meaningful moral discussions about what we “\_\_\_\_\_ do.”
  - Can't say it is \_\_\_\_\_ to be intolerant.
  - Can't complain about the problem of \_\_\_\_\_ (an argument against theism used by atheists).
  - Discuss other things relativists can't do if they are to remain consistent relativists.

4. Why do relativists claim that the moral belief “you *should* not murder” really means, “I *prefer* that you don’t murder”? How is this inconsistent with actual human moral experience?
  
5. “I highly value eating spoiled tuna salad because I believe it is good for me. This is *my* truth.” How does such ridiculous medical relativism illustrate some problems with moral relativism?
  
6. Discuss this definition of evolutionary ethics. How is this different than Judeo-Christian ethics? Objective ethical values do exist, but they are the result of animal evolution. Ethical values originate, and change, as they promote survival of complex creatures. Morality is *objective* in a materialistic sense (evolved traits that govern human behavior), but *subjective* (illusion) in its alleged grounding in truths about how persons ought to act regardless of their natural history.
  
7. Discuss this four-point argument for naturalistic evolutionary ethics.
  - Moral rules develop (are derived) from moral emotions.
  - Moral emotions include sympathy, love, guilt, shame, and anger.
  - Moral emotions evolve by natural selection to promote survival and reproductive success.
  - Therefore, moral emotions (and the moral rules derived from them) are an expression of genetically shaped instincts that evolved to promote survival. “In a sense, therefore, morality is a collective illusion foisted upon us by our genes.” M. Ruse.<sup>10</sup>
  
8. Discuss these problems with the argument for naturalistic evolutionary ethics.
  - It destroys any reason to live morally when one’s own desires contradict those of the group or society. Why should I care about others in the human species when it is a burden to me?
  - It cannot establish which instincts to indulge and which to suppress. How could a naturalist give an evolutionary explanation of which moral urges are better than others?
  - It provides no rationale for protecting the weak or “genetically inferior.”
  - It provides no rationale for valuing the individual.
  - Natural selection cannot even account for many innovations in biological structure, including the human brain. We have even stronger reasons to conclude that it cannot account for the moral impulses that allegedly derive from the neurocircuitry of the brain.

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<sup>10</sup> Michael Ruse, *Taking Darwin Seriously* (Oxford: Blackwell, 1986), p. 253. Ruse continues: “Note, however, that the illusion lies not in the morality itself, but in its sense of objectivity. I am certainly not saying that morality is unreal. Of course it is not! What is unreal is the apparent objective reference of morality.” P. 257: “We are all part of the game [of the *illusion* of morality], and even those of us who realize this have no desire to drop out.”

*Optional Bonus Questions*

9. Review the main reasons for accepting this thesis of lesson ten: “There are two naturalistic objections to the moral argument for God’s existence. Both objections (listed below) fail.”
- Moral relativism: Objective ethical values do not exist. What appear to be objective ethical values are just subjective preferences that are relative to individuals or social groups.
  - Evolutionary ethics: Objective ethical values originated from animal evolution. Ethical values are those ways of thinking and acting that have promoted survival within evolutionary history.
10. Discuss how does lesson ten strengthens the overall moral argument, which is: “The existence of God provides the only coherent explanation for the conditions of an objective and meaningful system of morality. Moreover, because the actions of all people reveal that they presuppose an objective and meaningful moral code, only a belief in God’s existence allows people to live consistently with their moral belief system.”

## Answer Key to TrueU Lesson 10

1. Argument for moral relativism. See the instructor's discussion notes in *italics*.
  - 1.5. If different people make different ethical judgments, then different people have different ethical values.
  - 1.6. Different people make different ethical judgments.  
*[Conclusion 1.7 does follow logically from premises 1.5 and 1.6].*
  - 1.7. Therefore, different people have different ethical values.  
*[This is a claim regarding people—that people have various opinions about ethical values].*
  - 1.8. Therefore, ethical principles are relative to persons or groups.  
*[This is a claim about ethical values—that objective ethical values don't exist].*  
*[Conclusion 1.8 does not follow logically from the earlier conclusion 1.7].*
2. How does the argument for moral relativism fail logically? The student handout has the answer.
3. How does moral relativism fail to make sense of our moral experience?

Answers are in *italics* for the three parts below.

- Moral debates seem to be about something important. *Relativists claim that disputes over the morality of sexual slavery are really just the expression of different preferences about human actions. Our experience of such heated debates tells us otherwise. Don't virtually all humans know that there is something wrong about capturing teenage girls and forcing them to work as prostitutes, and that this dispute is not just a matter of personal taste or custom?*
  - Errors and progress in ethical history seem possible. *We have strong intuitions that people in the past have made ethical errors and that we have reduced the occurrence of some of those errors by reforming society (e.g. abolishing slavery). Relativists deny that either "ethical errors" or "ethical progress" can occur. They treat all this as if it were like changing clothing fashions, which is not consistent with our experience of such changes.*
  - Our lives show the impossibility of living relativism consistently. Support this point with examples of "things relativists can't do" (yet we seem to experience such things routinely).
    - Can't accuse others of *wrongdoing*.
    - Can't accept praise for a moral act (*because they say there is no standard for "good"*)
    - Can't improve their *morality* (*because they say there is no standard for "improvement"*)
    - Can't hold meaningful moral discussions about what we "*should do*."
    - Can't say it is *wrong* to be intolerant.
    - Can't complain about the problem of *evil* (an argument against theism used by atheists).
4. Why do relativists claim that the moral belief "you *should* not murder" really means, "I *prefer* that you don't murder"? How is this inconsistent with actual human moral experience?
    - Relativists claim that moral beliefs are human inventions rather than transcendent truths about what is really "right" and "wrong" regardless of what individuals believe. Thus, statements such as "murder is wrong" amount to mere human expressions of personal preference.

- Yet all of us, even relativists, experience the strong intuition that murder is morally “wrong” in a sense that goes much deeper than their personal taste.

5. “I highly value eating spoiled tuna salad because I believe it is good for me. This is *my* truth.” How does such ridiculous medical relativism illustrate some problems with moral relativism?

- Just because some people disagree about the value of various human actions (e.g. the Holocaust), this does not mean that there is no truth about the goodness or badness of certain human actions. If we don’t accept relativist thinking in the realm of food poisoning, then why should we accept such relativist thinking in ethics?
- Just as there are good reasons to think that there are objective facts about what is medically good and bad about eating certain things, similarly there are good reasons (often widely recognized across cultures) to think that certain human actions are morally wrong, such as brutal Nazi scientific experiments on live Jews.
- The spoiled tuna salad story illustrates how medical relativism and moral relativism imply the following without supplying good reasons:
  - What appear to be heated disputes over medical facts and objective ethical values are really just conversations about different subjective preferences.
  - People never make medical or ethical errors.
  - Progress in medicine and ethics is impossible. There is not such thing as “improved food spoilage cafeteria policy” or “better human racial relations after the abolition of slavery.”

6. This question and the remaining ones are easy enough that you do not need an answer key.

## Optional Conclusion to TrueU DVD Set #1: Does God Exist?

1. In our first series of ten DVD sessions we have found many good reasons to believe that God exists. These reasons are based on evidence found in cosmology, biology, and moral experience. Why does having good reasons for your faith matter? Why does it especially matter given the popularity of the “new atheism”?
  
2. In your opinion, what evidence that we have covered best supports God’s existence? Why?
  
3. What evidence or arguments still appear puzzling or doubtful? Why?
  
4. Given that everyone has a worldview (whether a person is traditionally religious or not), how should the evidence for God’s existence affect how we answer the following worldview questions? A worldview is a personal philosophy about the nature of reality that answers questions such as:
  - What is the prime reality—upon *what* does everything depend?
  - What is the nature of the external world around us?
  - Can we know anything truly or objectively?
  - What does it mean to be human?
  - What is right and wrong?
  - What happens to a person at death?
  - What is the meaning of human history?
  
5. How has this study affected your life?

Where do we go from here?

- Now that you know some of the evidence for the existence of God, additional questions arise:
  - Who is this God and is the Bible a reliable guide to God and his desires from me?
  - Why should we consult this particular religious book?
- Do you want answers? Plan to study TrueU DVD Set #2: *Is the Bible Reliable?*