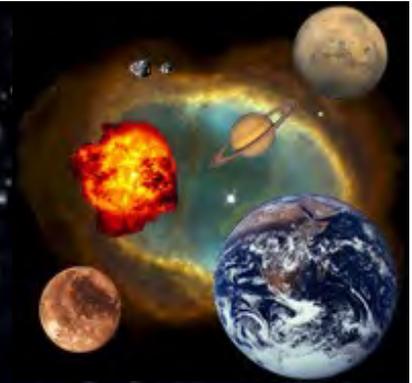


# Astronomy and the Bible



Mike Riddle  
[www.Train2Equip.com](http://www.Train2Equip.com)



# Topics

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- ◆ Two models
- ◆ Evidence of age
- ◆ Origin of stars
- ◆ Scientific evidence and the big bang
- ◆ The Bible and big bang cosmology



# Two Models

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- ◆ Evolution / Theistic evolution
  - Big Bang
  - Universe 12–15 billion years old
  - Stellar formation (natural processes)
  
- ◆ Biblical model
  - God spoke the universe into existence
  - Young universe
  - God created the stars



# Evaluating the Evidence

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- ◆ Textbooks and science journals
  - Big bang – billions of years old
  - Distant starlight – billions of years old

Are we being given all the evidence



Evidence against one position is  
support for the other position



# Recession of the Moon

---

- ◆ Earth's force of gravity pulls on the moon
- ◆ The moon pulls back on the earth (Newton's 3<sup>rd</sup> law of motion)
- ◆ This causes the moon to accelerate in its orbit so that it slowly spirals away from the earth (4 cm/year)



# Earth – Moon Distances

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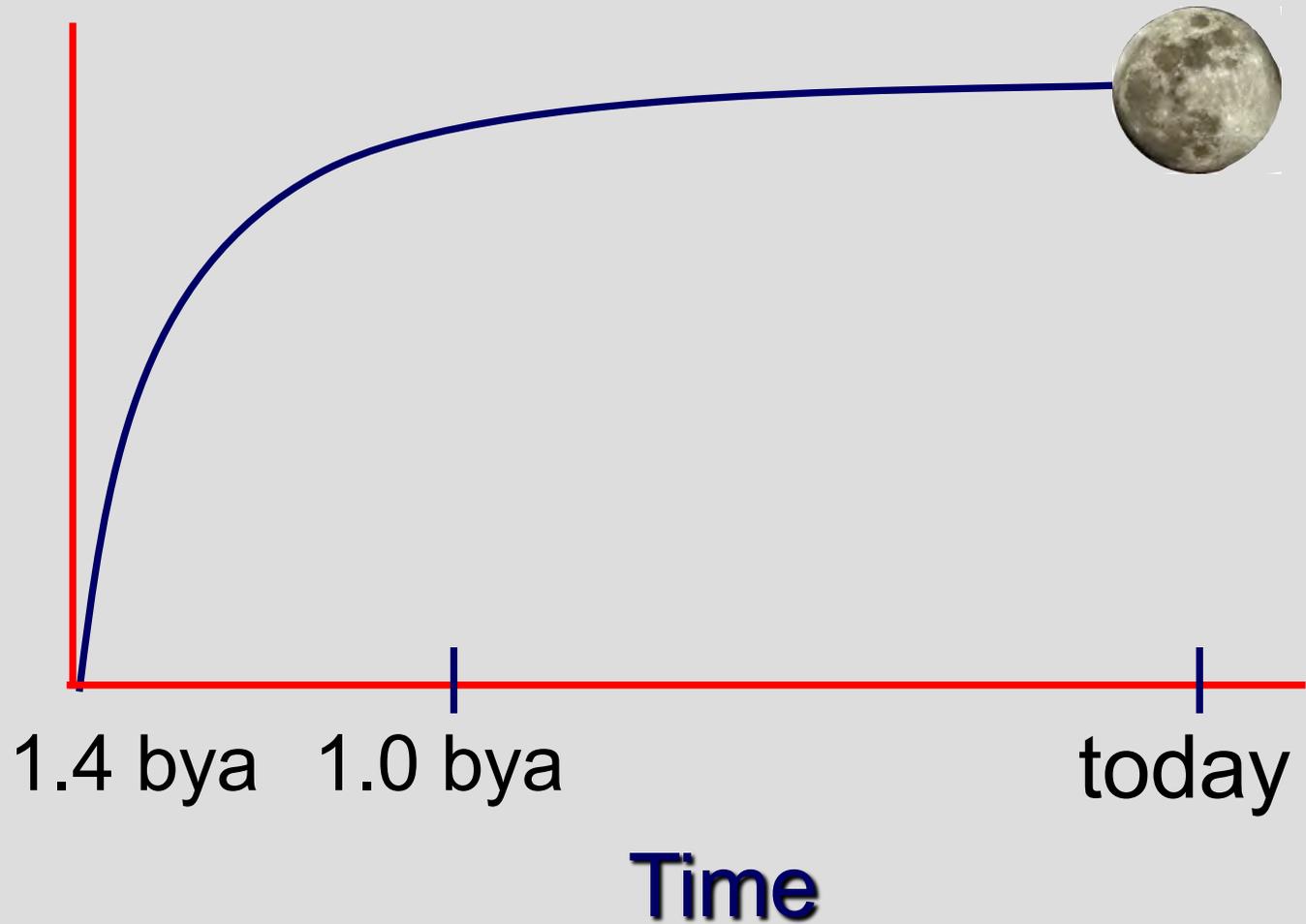
1,000 years ago	125 feet closer
1 million years ago	28.4 miles closer
10 million years ago	284 miles closer
100 million years ago	2,840 miles closer
1 billion years ago	28,400 miles closer
1.4 billion years ago	contact



# Recession of the Moon

---

Distance  
from  
Earth





# Origin of the Moon

---

## Fission Theory

The earth spun so fast a chunk broke off

## Problems

1. The moon is chemically different
2. The earth could never spin fast enough
3. The escaping moon would break up



# Origin of the Moon

---

## Capture Theory

The moon was captured by the earth's gravity

## Problem

The moon would need to lose a lot of energy or it would be slingshot rather than captured



# Origin of the Moon

---

## Co-Creation Theory

The earth and moon formed at the same time from debris orbiting the sun

## Problems

1. The earth and moon are different chemically
2. It is unlikely the gravitational attraction would be strong enough



# Origin of the Moon

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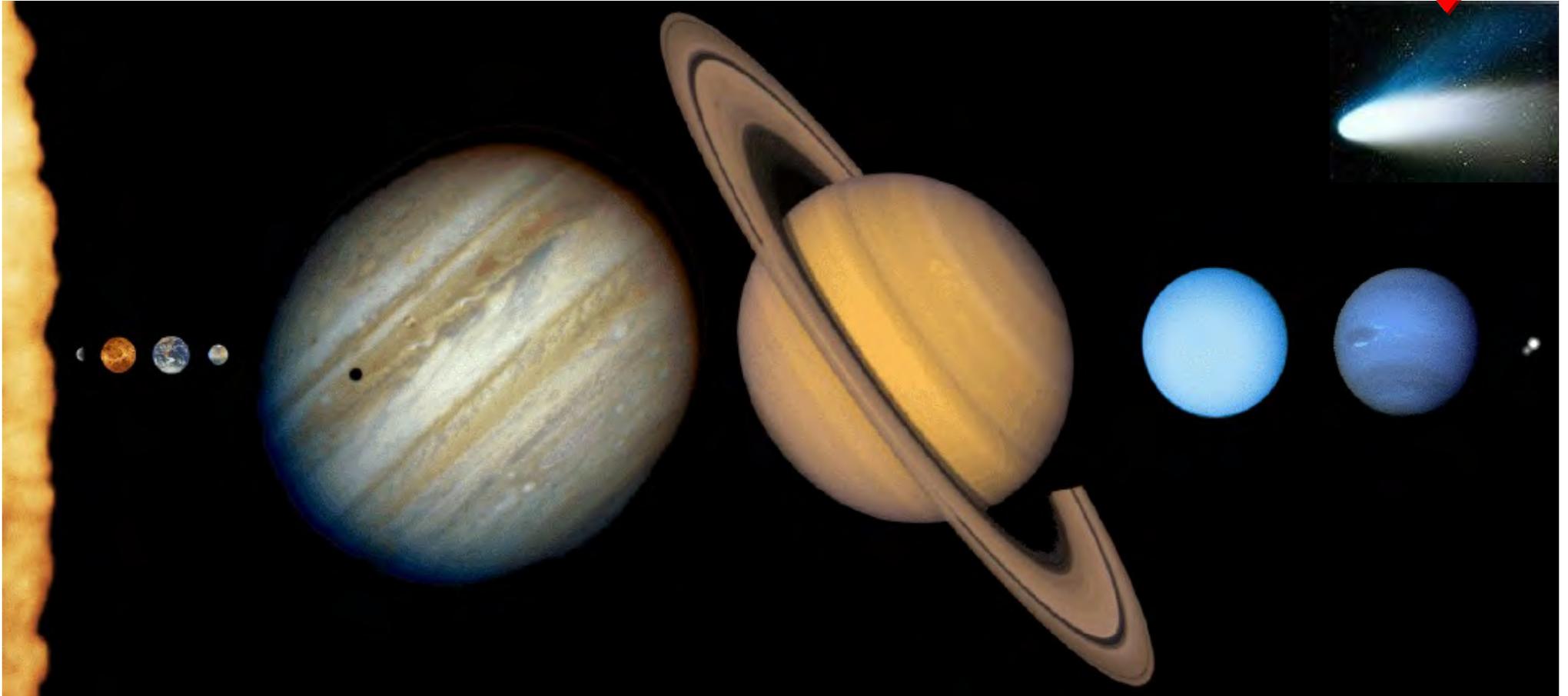
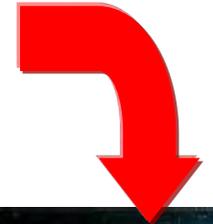
A. Snyder Ruzicka and L. A. Taylor, “Giant Impact and Fission Hypotheses for the Origin of the Moon: A Critical Review of Some Geochemical Evidence, *International Geology Review* (1998): 851.

“The origin of the moon is still unresolved.”

The best explanation is that the moon was created in its present orbit about 6,000 years ago



# Comets



Long-period comets  
Short-period comets



# Comets

---

- ◆ If the solar system is billions of years old, then “long period” comets should not exist
- ◆ The evolution model postulates that they are being replaced – the Oort cloud
- ◆ Problems with the Oort cloud
  - It has never been observed
  - There is NO evidence that it exists
  - Not enough mass in the hypothetical Oort cloud



# Oort Cloud and Kuiper Belt

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Don DeYoung, Ph.D. Physics, *Astronomy and the Bible*, 2000, pp. 49-50

“The existence of the Kuiper belt and the Oort cloud of comets has not been verified. Perhaps there is an alternative: The presence of comets may be evidence that the solar system is not as old as is often assumed.”





# Comets and the Oort Cloud

---

Timothy Ferris, *The Whole Shebang: A State-of-the-Universe Report*, 1997, p. 123.

“Though the Oort cloud has yet to be observed, the theory accounts so well for the distribution of comets’ orbits that most astronomers today accept its existence,…”

## Definition of faith

An unquestioning belief that does not require proof or observation.



# Comets and the Oort Cloud

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“Many scientific papers are written each year about the Oort Cloud, its properties, its origin, its evolution. Yet there is not yet a shred of direct observational evidence for its existence.”

Who said this?

Carl Sagan and A. Druyan, *Comets*, 1985, p. 201.



# Comets and the Oort Cloud

---

Danny Faulkner, Ph.D. Astronomy, “More Problems for the Oort Comet Cloud,” *Technical Journal* (2001): 11.

“Since it cannot be detected, the Oort cloud is not a scientific concept. This is not bad science, but non-science masquerading as science. The existence of comets is good evidence that the solar system is only a few thousand years old...”



# The Age of the Sun

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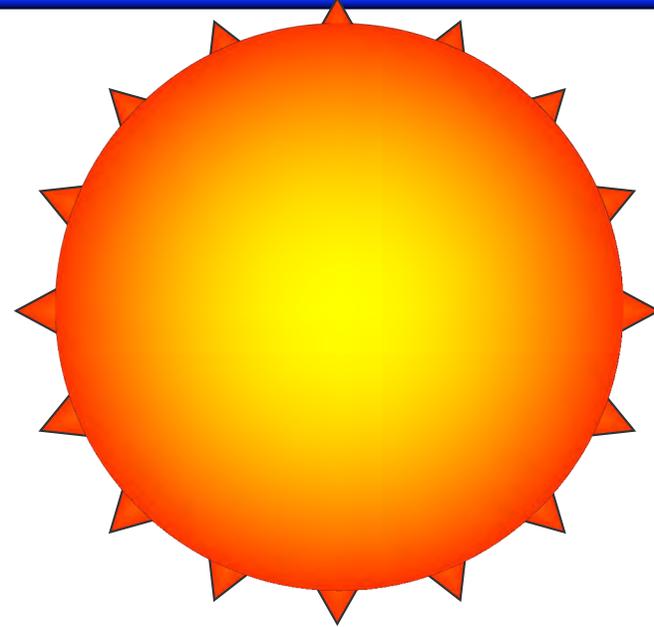


- ◆ Energy by thermonuclear fusion
- ◆ The core of the sun should alter and the sun should grow brighter with age
- ◆ If the sun is 4.6 byo, it should have brightened by about 40%



# The Sun and Life

---



Earth average temperature (59 F or 15 C)

A 25% increase in brightness increases the average temperature by about 32° F (18° C)

(59° – 32° = 27° F (Average temperature))



# Evidences for a Young Universe

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- ◆ Recession of the moon
  - ◆ Comets
  - ◆ Age of the sun
- ◆ Supernova remnants
  - ◆ Galaxy formation



# Evidences for a Young Universe

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## Supernova remnants (SNRs)



Crab Nebula

Light from the supernova reached the earth in 1054



# Evidences for a Young Universe

Supernova remnant	Number of observable SNRs predicted if our galaxy is:		Actual number observed
Stage	Billions of years old	7000 years old	
First	2	2	5
Second	2260	125	200
Third	5000	0	0



# Galaxy Formation

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Spiral Galaxy  
M101



M51 The Whirlpool  
Galaxy



# Milky Way Galaxy

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Russel Humphreys, Ph.D. Physics, *Evidence for a Young World*

“The stars of our own galaxy, the Milky Way, rotate about the galactic center with different speeds, the inner ones rotating faster than the outer ones. The observed rotation speeds are so fast that if our galaxy were more than **a few hundred million years** old, it would be a featureless disc of stars instead of its present spiral shape.”



# Formation of Galaxies

---

Joseph Silk (Professor of Astronomy at the University of Oxford), *The Big Bang*, 2001, p. 195.

“Many aspects of the evolution of galaxies cannot yet be determined with any certainty.”



# Galaxies

---

James Trefil, Ph.D. Physics, *The Dark Side of the Universe*, 1988, p. 3 & 55.

“There shouldn’t be galaxies out there at all, and even if there are galaxies...

The problem of explaining the existence of galaxies has proved to be one of the thorniest in cosmology.”



# Galaxy Formation

---

*The Facts on File Dictionary of Astronomy*, 1994,  
p. 172.

“Galaxies must have condensed out of the  
gases expanding from the big bang....

Details of the formation of galaxies are still  
highly uncertain, as is their subsequent  
evolution.”

Why is this any more scientific than:

**In the beginning God created...**

Two models

Evidence of age

## **Origin of stars**

Scientific evidence and the big bang

The Bible and big bang cosmology

Are we being told all the evidence or just selected information to support a particular idea?



# The Origin of Stars

---

## Evolution

Stars evolved billions of years before the earth

## Theistic evolution / progressive creation

Stars evolved billions of years before the earth

## The Bible

Earth created on day 1

The sun, moon, and stars on day 4



# The Origin of Stars

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Hugh Ross (Astronomer), “Species Development: Natural Process or Divine Action,” Audiotape (Pasadena, CA: Reasons to Believe, 1990).

“The entire process of stellar evolution is by natural process alone. We do not have to invoke Divine intervention at any stage in the history of the life-cycle of the stars that we observe.”

**Is this statement consistent with  
the Bible?**



# The Origin of Stars

---

And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also.

Genesis 1:16

Lift up your eyes on high, and behold who hath created these things, that bringeth out their host by number...

Isaiah 40:26

When I consider thy heavens, the work of  
thy fingers, the moon and the stars, which  
thou hast ordained

## Psalm 8:3





# The Origin of Stars

---

- ◆ (Ex 20:11) For in six days...
- ◆ (Ps 19:1) The heavens declare the glory of God
- ◆ (Ps 33:6) By the word of the Lord were the heavens made; and all the host of them...
- ◆ (Ps 148:5) ... for he commanded, and they were created



# The Origin of Stars

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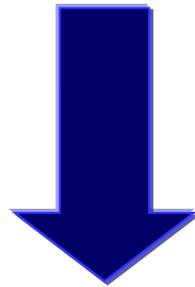
- ◆ (Is 45:12) ...I, even my hands, have stretched out the heavens, and all their hosts have I commanded

Nehemiah 9:6

Thou, even thou, are Lord alone; thou hast made heaven, the heaven of heavens, with all their host...

- ◆ (John 1:3) All things were made by him...
- ◆ (Rev 4:11) ...for thou hast created all things, and for thy pleasure they are and were created

Is stellar formation by natural processes compatible with Scripture?



**No!**

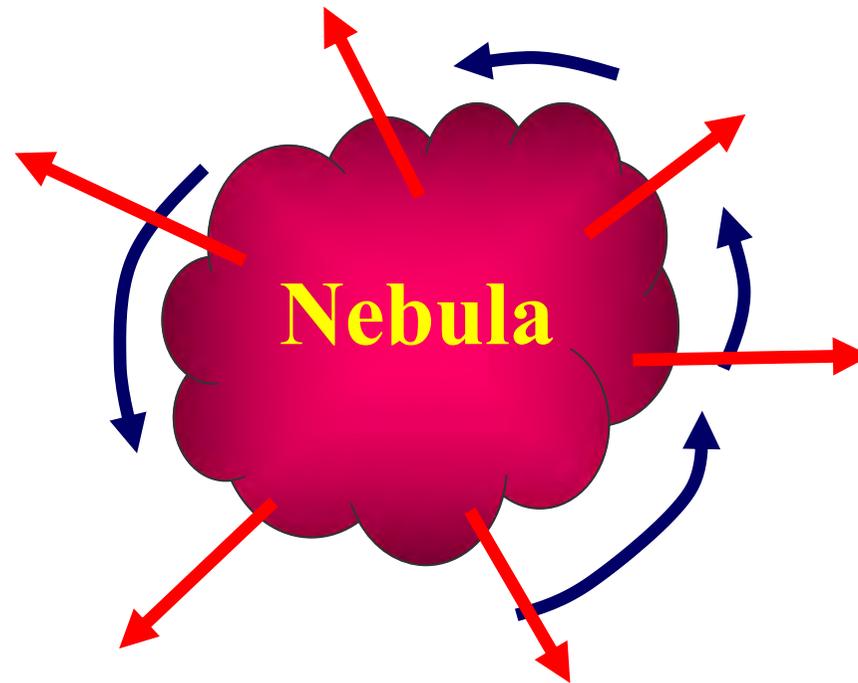
It is by the Word of the Lord that the universe and stars were created



# Star Formation and Physics

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The popular theory is that stars form from vast clouds of gas and dust through gravitational contraction.



Gas and  
dust clouds  
will expand  
—NOT  
contract



# Star Formation

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Don DeYoung (Ph.D. in Physics), *Astronomy and the Bible*, 2000, p. 84.

“The complete birth of a star has never been observed. The principles of physics demand some special conditions for star formation and also for a long time period. A cloud of hydrogen gas must be compressed to a sufficiently small size so that gravity dominates.

In space, however, almost every gas cloud is light-years in size, hundreds of times greater than the critical size needed for a stable star. As a result, outward gas pressures cause these clouds to spread out farther, not contract.”



# Star Formation

---

Fred Whipple, *The Mystery of Comets* (Washington, D.C.: Smithsonian Institute Press, 1985), pp. 211, 213.

“Precisely how a section of an interstellar cloud collapses gravitationally into a star ... is still a challenging theoretical problem... Astronomers have yet to find an interstellar cloud in the actual process of collapse.”



# Star Formation

---

Danny Faulkner, Ph.D. Astronomy

“To many astronomers it seems reasonable that stars could form from these clouds of gas. Most astronomers believe that the clouds gradually contract under their own weight to form stars. This process has never been observed, but if it did occur, it would take many human lifetimes.

continued

It is known that clouds do not spontaneously collapse to form stars. The clouds possess considerable mass, but they are so large that their gravity is very feeble. Any decrease in size would be met by an increase in gas pressure that would cause a cloud to re-expand.”



# Star Formation

---

Hannes Alfvén (Nobel prize winner), Gustaf Arrhenius, “Evolution of the Solar System”, NASA, 1976, p. 480.

“There is general belief that stars are forming by gravitational collapse; in spite of vigorous efforts no one has yet found any observational indication of conformation. Thus the ‘generally accepted’ theory of stellar formation may be one of a hundred unsupported dogmas which constitute a large part of present-day astrophysics.”



# Star Formation

---

Charles Lada and Frank Shu (both astronomers),  
“The Formation of Sunlike Stars,” *Science*, 1990,  
p. 572.

“Despite numerous efforts, we have yet to directly observe the process of stellar formation.... The origin of stars represents one of the fundamental unsolved problems of contemporary astrophysics.”



# Star Formation

---

*The Facts on File Dictionary of Astronomy,*  
1994, p. 434.

“Stars are formed by the gravitational collapse of cool dense gas and dust clouds....

There are problems, however, in initiating the collapse of a gas cloud. It resists collapse because of firstly its internal motions and the heating effects of nearby stars, secondly the centrifugal support due to rotation, and thirdly the magnetic field pressure....

continued

In a massive dense cloud shielded by dust, it is believed that collapse can be triggered when the cloud is slowed on passing through the spiral density-wave pattern of our galaxy:....”

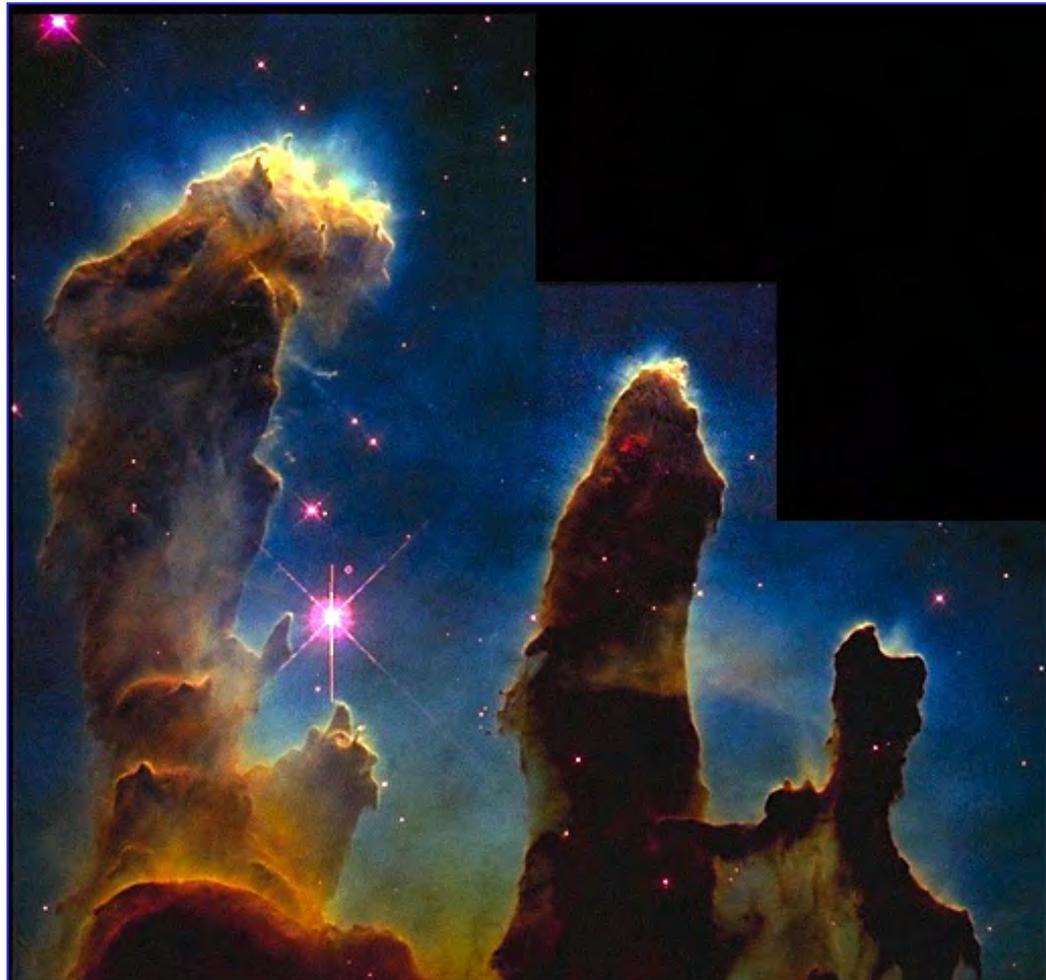
*The Facts on File Dictionary of Astronomy*, 1994, p. 434.



# Star Nurseries

---

Do pictures confirm stars are forming?



Eagle nebula



# Star Nurseries

---

Martin Rees (A leading researcher on cosmic evolution), *Before the Beginning*, 1998, p. 19.

“Stars are still forming today. About 1500 light-years away lies the Orion Nebula: enough gas and dust to make millions of stars....

It even contains protostars that are still condensing ...”



# Star Formation and Nebula

---

Images taken by the European Southern Observatory Very Large Telescope in January 2002 of the Horsehead Nebula in Orion verified that the structures are expanding.

Anglo-Australian  
Observatory, Photograph by  
David Malin





# Star Formation and Time

- ◆ 100 billion galaxies ( $10^{11}$ )
- ◆ 200 billion stars per galaxy ( $2 \times 10^{11}$ )
- ◆ Universe 20 billion years old ( $2 \times 10^{10}$ )

$$\frac{100 \text{ Billion} \times 200 \text{ Billion}}{20 \text{ billion}} = 1 \text{ trillion stars per year}$$

- ◆ 2.7 billion stars per day
- ◆ 31,700 stars per second



# Textbooks: Are They Correct?

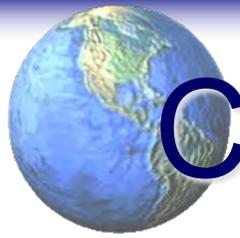
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*Prentice Hall Earth Science, 2001, p. 733.*

“A nebula is a large amount of gas and dust spread out in an immense volume. All stars begin their lives as parts of nebula.

Gravity can pull some of the gas and dust in a nebula together. The interacting cloud is then called a protostar. ... A star is born when the contracting gas and dust become so hot that nuclear fusion starts.”

**Is this statement based on science or a belief in evolution?**



# Conclusion on Star Formation

---

Abraham Loeb (Harvard Center for Astrophysics),  
quoted by Marcus Chown, “Let There Be Light”,  
*New Scientist*, Feb 7, 1998

“The truth is that we don’t understand  
star formation at a fundamental level.”

## Question

Why do so many textbooks state  
we know how stars form?

Two models

Evidence of age

Origin of stars

## **Scientific evidence and the big bang**

The Bible and big bang cosmology

Are we being told all the evidence or just selected information to support a particular idea?



# The Big Bang

---

Evidences used to support the big bang

- ◆ Redshift
- ◆ Cosmic Background Radiation
- ◆ Element abundances
- ◆ Education system and media



# Evidence Contradicting the Big Bang

---

- ◆ Redshift
- ◆ Cosmic Background Radiation
- ◆ Galaxy formation
- ◆ Spiral Galaxies
- ◆ Supernova Remnants (SNR)
- ◆ Distribution of galaxies
- ◆ 1<sup>st</sup> and 2<sup>nd</sup> Laws of Thermodynamics
- ◆ Medium and heavy elements
- ◆ Star formation



# The Big Bang

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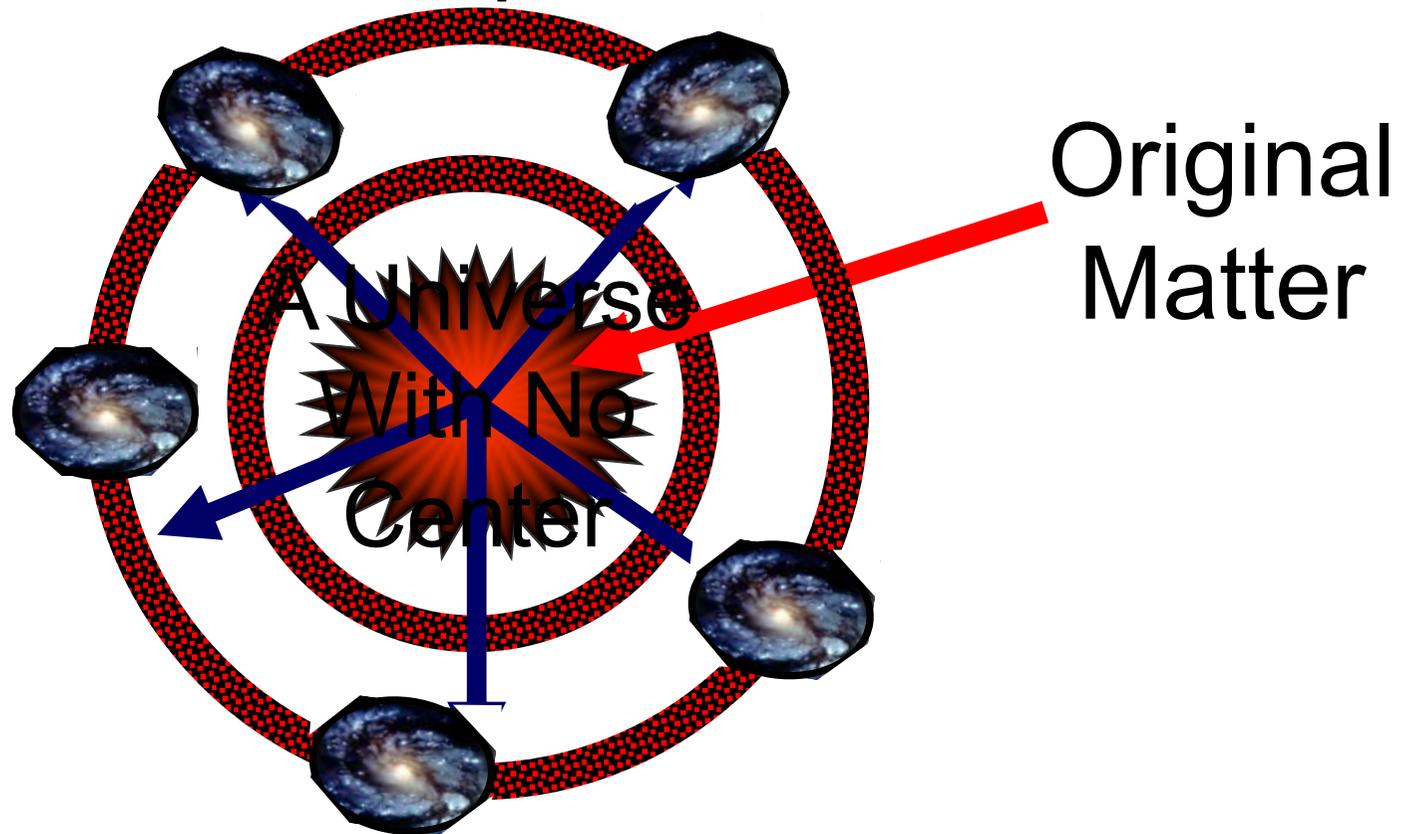
*The Handy Space Answer Book, 1998*

“Fifteen to twenty billion years ago a big bang, or explosion, occurred, creating the universe. The universe began as an infinitely dense, hot fireball, a scrambling of space and time.”



# The Big Bang

Expansion of space and time



Does this sudden explosion of nothing into something (the universe) sound like a miracle?



# The Big Bang

---

Paul Davies, physicist and evolutionist, in his book - *The Edge of Infinity*, describes the big bang this way:

“[The big bang] represents the instantaneous suspension of physical laws, the sudden abrupt flash of lawlessness that allowed something to come out of nothing. It represents a true miracle...”

Why is this more scientific than  
In the beginning God created?



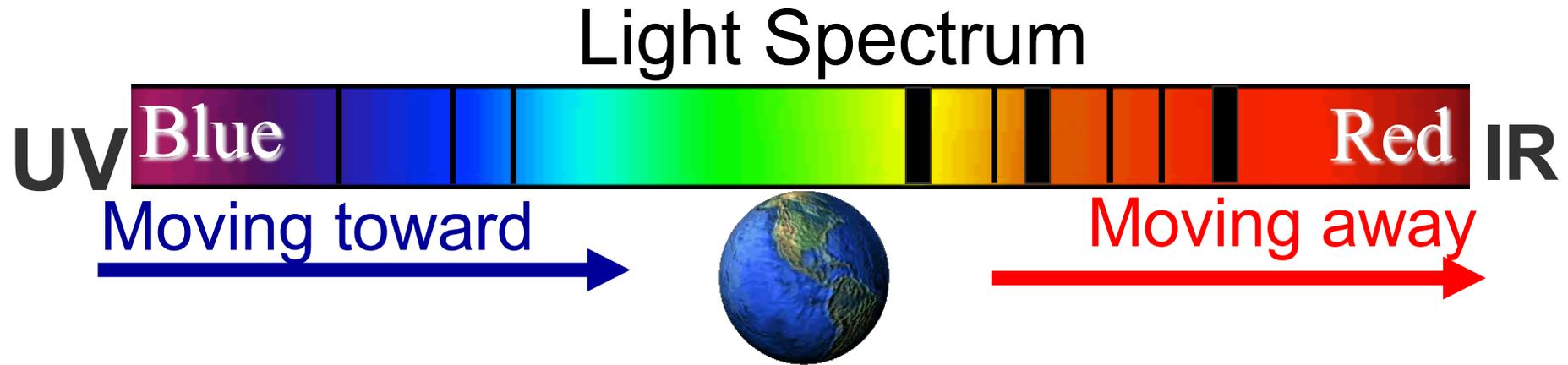
# The Big Bang

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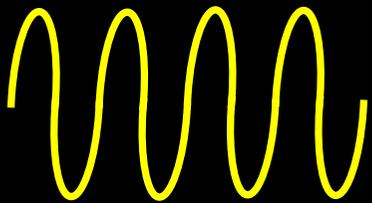
- ◆ There is no special place in the universe
- ◆ There is no center to the universe
- ◆ The universe is homogeneous



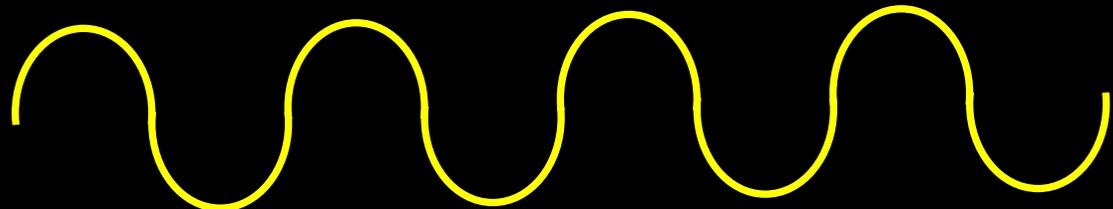
# Redshift of Starlight



1. Describe the expansion of the universe
2. The distance of a galaxy from the earth



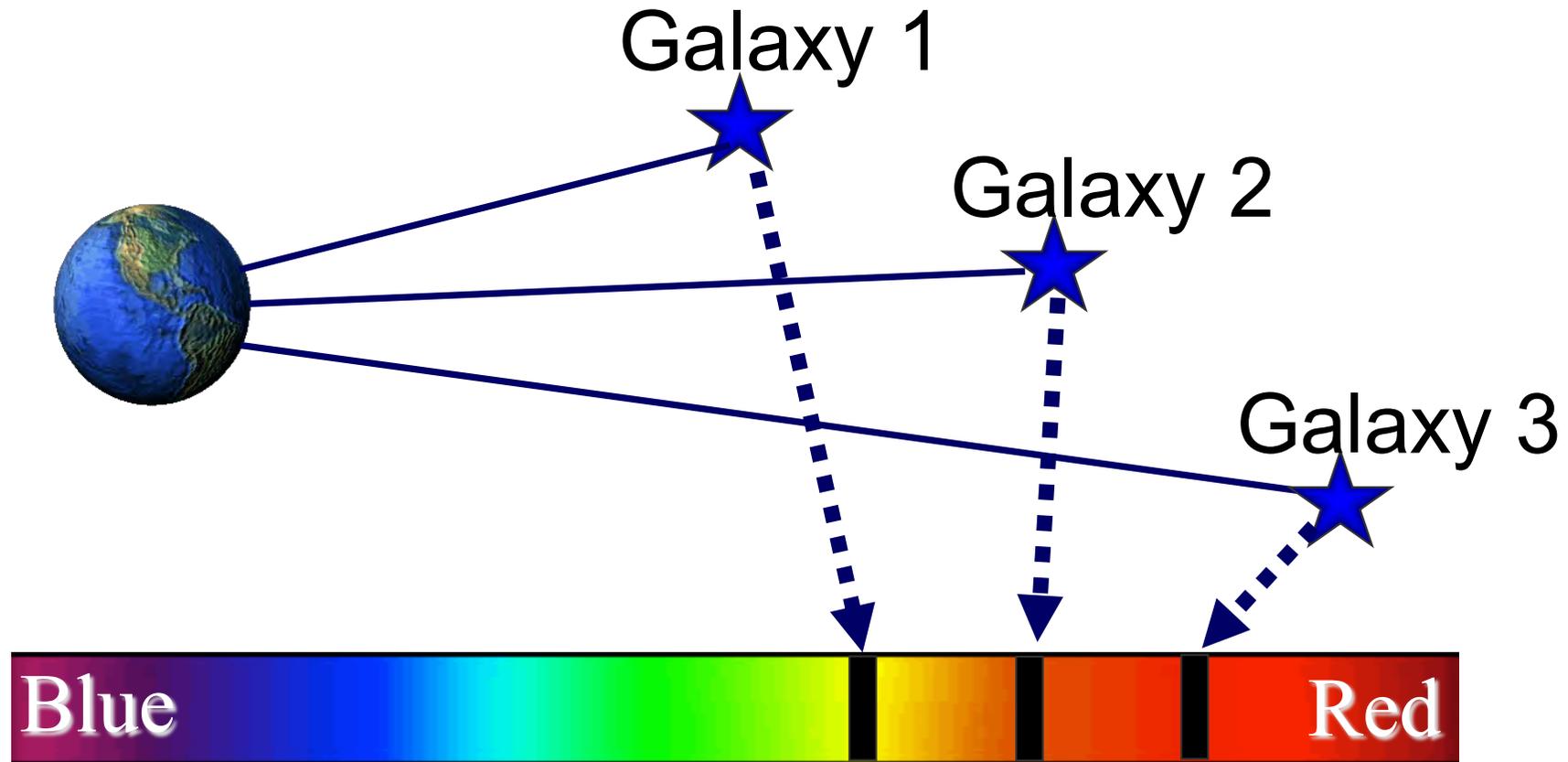
Compressed (blue side)



Stretched (red side)



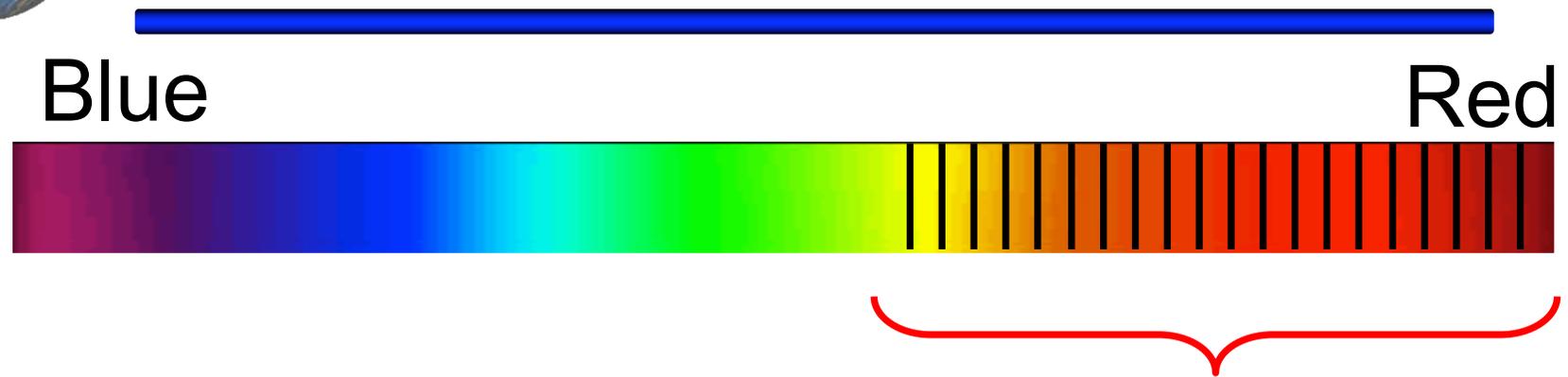
# Redshift Interpretation



We should observe redshifts at all distances along the light spectrum (big bang model)



# Redshift Values



**What we observe**

Big bang model predicts a homogeneous universe

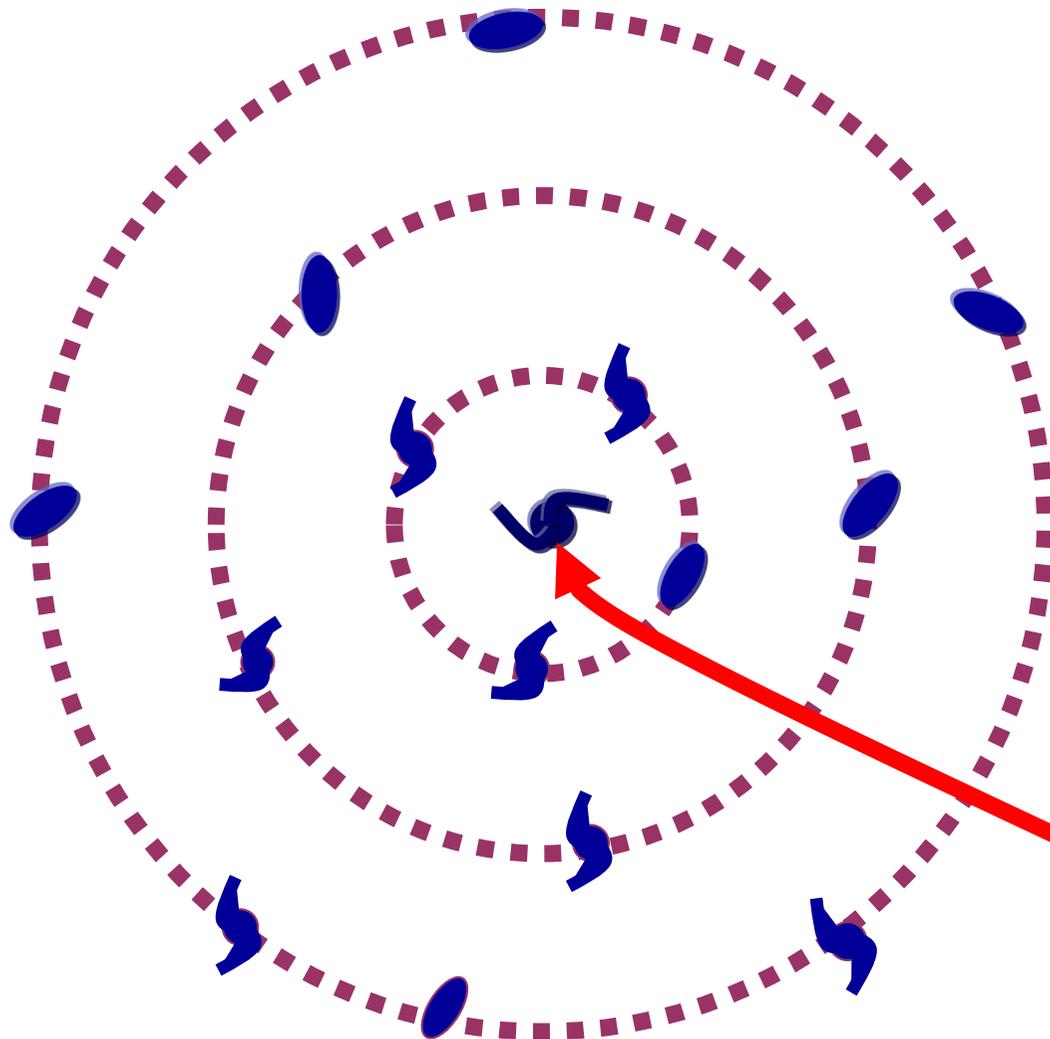


Distinct quanta (1-million light year intervals)



# Redshifts and Galaxy Distances

---



Concentric  
circles 1-million  
light years apart

Milky Way

**Has this been confirmed and what does it mean?**



# Confirmation of Quantized Redshifts

---

W. G. Tifft and W. J. Cocke, “Global Redshift Quantization,” *Astrophysical Journal*, 1984

“There is now very firm evidence that redshifts of galaxies are quantized ...”



# Redshifts

---

Russell Humphreys, Ph.D. Physics,  
*Technical Journal*, 2002

“Astronomers have confirmed that numerical values of galaxy redshifts are ‘quantized’, tending to fall into distinct groups. ...

That would mean the galaxies tend to be grouped into (conceptual) spherical shells concentric around our home galaxy.”



# Confirmation from Hubble

---

W. Napier and B. Guthrie, “Quantized Redshifts: A Status Report,” *Journal of Astrophysics and Astronomy*, 1997.

“... the redshift distribution has been found to be strongly quantized in the galactocentric frame of reference.”

**What does this mean to the big bang?**



# Implications of Quantized Redshifts

---

Russell Humphreys, Ph.D. Physics, *Starlight and Time*, 1994, p. 128.

“...the quantized distribution of galactic red shifts, observed by various astronomers seems to contradict the Copernican principle and all cosmologies founded on it – including the big bang.”



# Implications of Quantized Redshifts

---

Halton Arp (Staff astronomer at the Mount Wilson and Palomar Observatories for 29 years), *Quasars, Redshifts and Controversies*, 1987, p. 195.

“The fact that measured values of redshift do not vary continuously but come in steps – certain preferred values – is so unexpected that conventional astronomy has never been able to accept it, in spite of the overwhelming observational evidence.”

Two models

Evidence of age

Origin of stars

Scientific evidence and the big bang

**The Bible and big bang cosmology**



# Implications of the Big Bang

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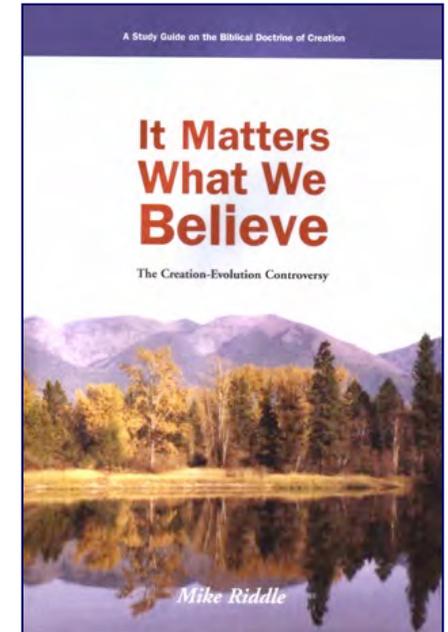
- ◆ God's creation was not 6-days
- ◆ The meaning of "very good" in Genesis 1:31
- ◆ Death before sin
- ◆ The Genesis Flood was not worldwide
- ◆ Colossians 1:16 "all" does not mean all things
- ◆ What do the heavens declare: God or evolution?



# The Bible and the Time of Creation

---

1. Day with a number
2. Evening and morning
3. Genesis 1:14
4. Exodus 20:11, 31:17
5. Words used to indicate time
6. Sentence structure
7. Genealogies (Gen 5, 1 Chron 1, Luke 3)
8. Plants and sunlight
9. The sun
10. The plain reading of the text





# Nothing Too Difficult for God

17 times the Bible declares that God stretched the heavens

2 Sam 22:10

Job 37:18

Isaiah 51:13

Psalms 18:9

Isaiah 40:22

Jeremiah 10:12

Psalms 104:2

Isaiah 42:5

Jeremiah 51:15

Psalms 144:5

Isaiah 44:24

Ezekiel 1:22

Job 9:8

Isaiah 45:12

Zechariah 12:1

Job 26:7

Isaiah 48:13



# A God of Miracles

---

- ◆ God created trees mature with fruit
- ◆ God created mature animals
- ◆ God created Adam mature
- ◆ Jesus fed the 5,000
- ◆ Jesus turned water into wine
- ◆ Jesus withered the fig tree (Matt 21:18-19)
- ◆ Instant learning of language (Tower of Babel)
- ◆ Instant healing of soldier's ear (Luke 22:51)
- ◆ Creation was “very good” (Gen 1:31)



# Scientists

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Danny Faulkner	Ph.D. Astronomy
John Byl	Ph.D. Astronomy
Tom Greene	Ph.D. Astronomy
Dave Harrison	Ph.D. Astrophysics
James Dire	Ph.D. Astrophysics
John Rankin	Ph.D. Mathematical Physics
Keith Wanser	Ph.D. Condensed Matter Physics
Russell Humphreys	Ph.D. Physics
Barbara Helmkamp	Ph.D. Physics
Don DeYoung	Ph.D. Physics
Robert Gentry	Ph.D. Physics
Eugene Chaffin	Ph.D. Nuclear Physics
Ron Samec	Ph.D. Physics
John Cimbala	Ph.D. Aeronautics
Andrew McIntosh	Ph.D. Combustion Theory
Hee-Choon No	Ph.D. Nuclear Engineering
Jay Wile	Ph.D. Nuclear Chemistry



# The Pattern of Evolution

We have seen a pattern in the evolution model interpretation of cosmology

- ◆ Not reporting all the evidence
- ◆ Constantly updating the big bang model to match observed data
- ◆ Disagreement among astronomers
- ◆ A disregard for Biblical interpretation
- ◆ An appeal to churches to accept “real science” (you can have evolution and the Bible)



# Critical Thinking

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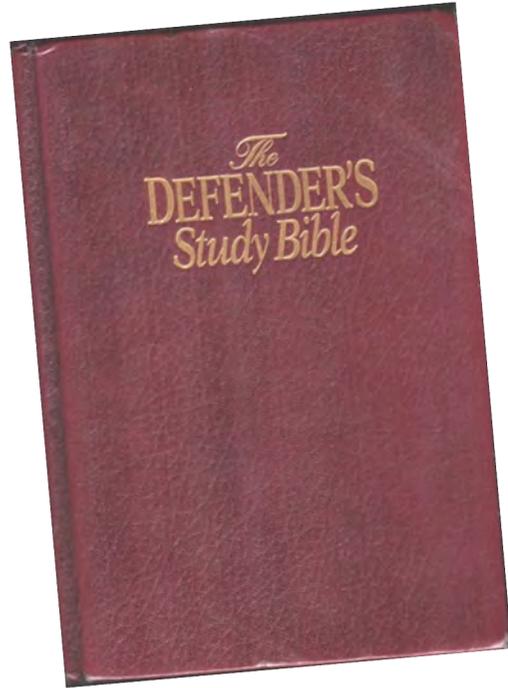
Which is easier to believe

- 1) Nothing created something (the universe)
- 2) In the beginning God created...



# Answers

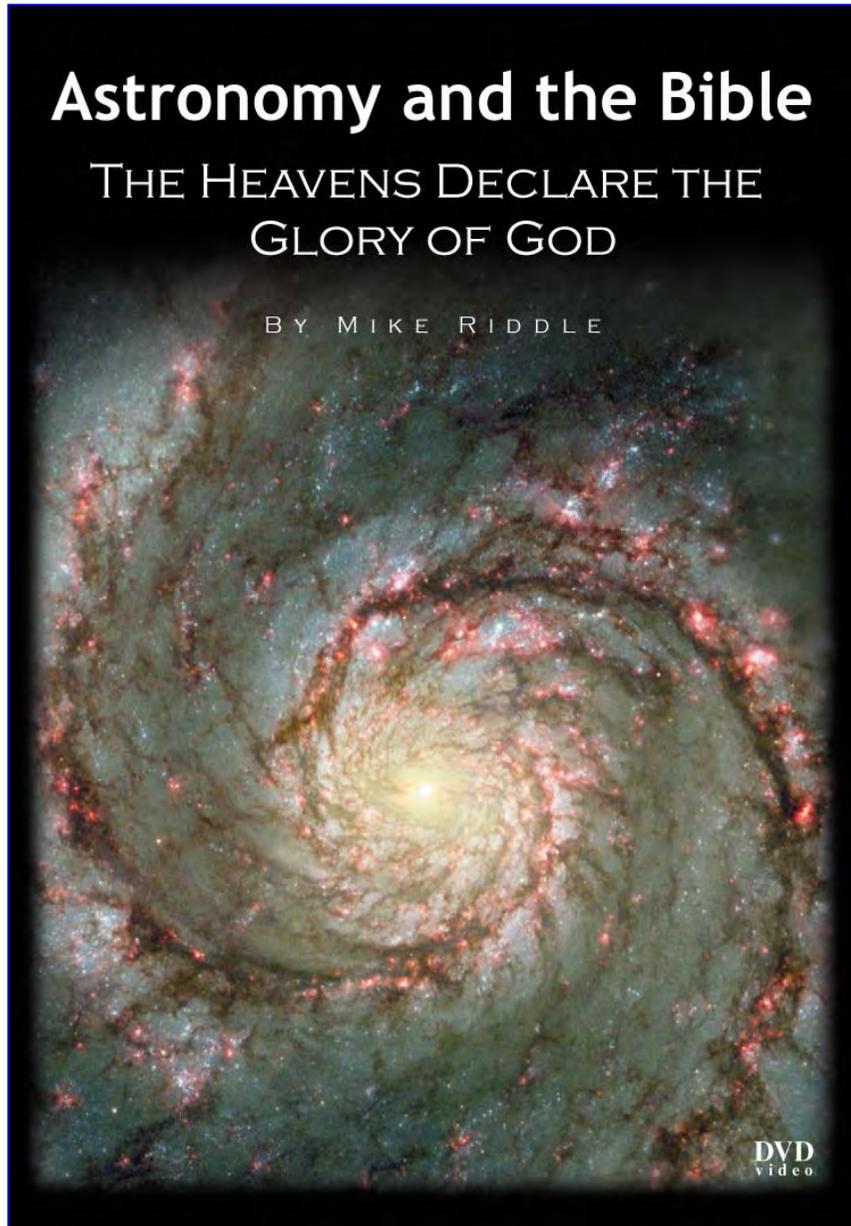
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The creation by God  
gives meaning to the  
universe

Who created  
What was created  
How it was created  
When it was created  
How long it took to create

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- ◆ Detailed outline of the DVD
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# The Bible and the Time of Creation

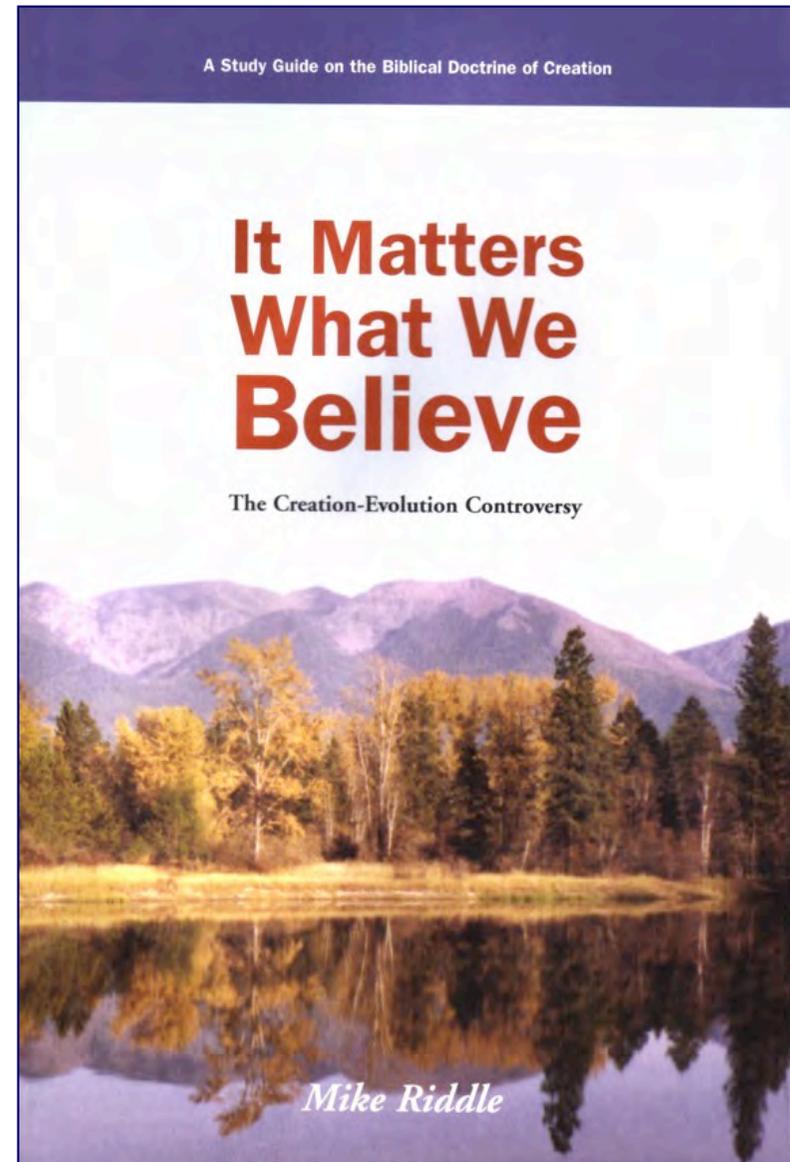
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12 Biblical evidences  
why the earth is young

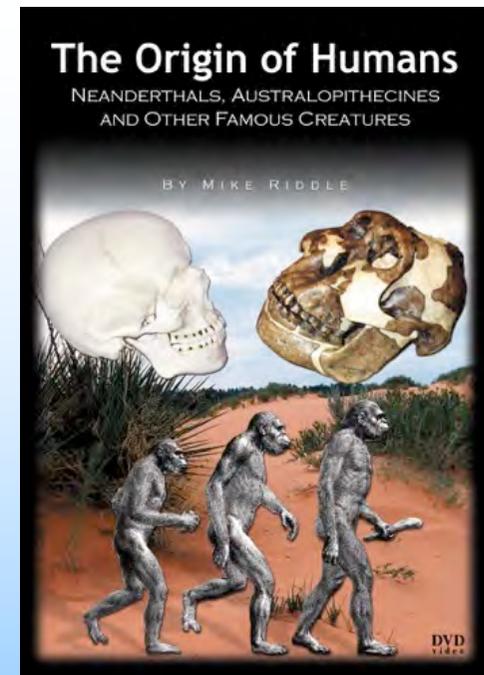
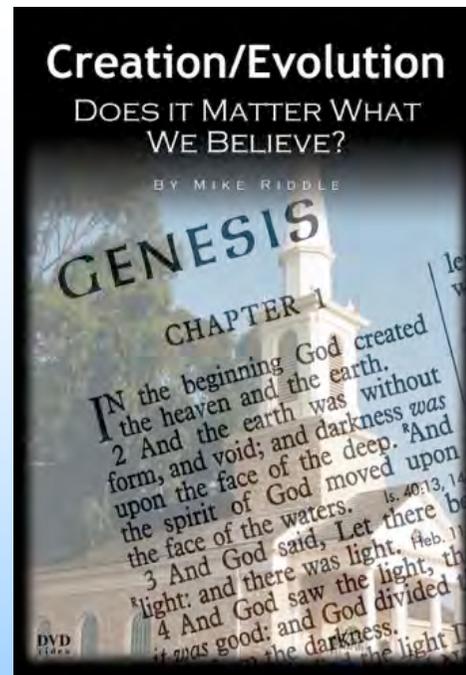
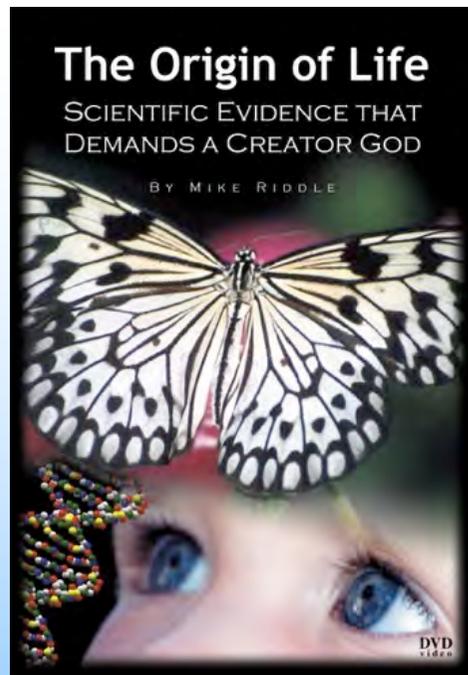
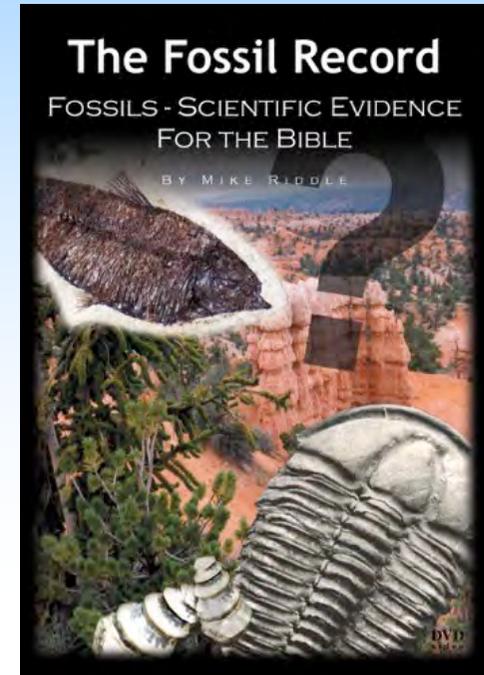
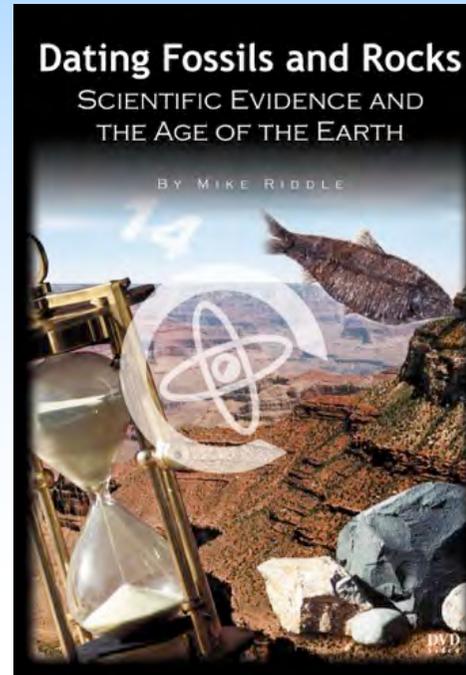
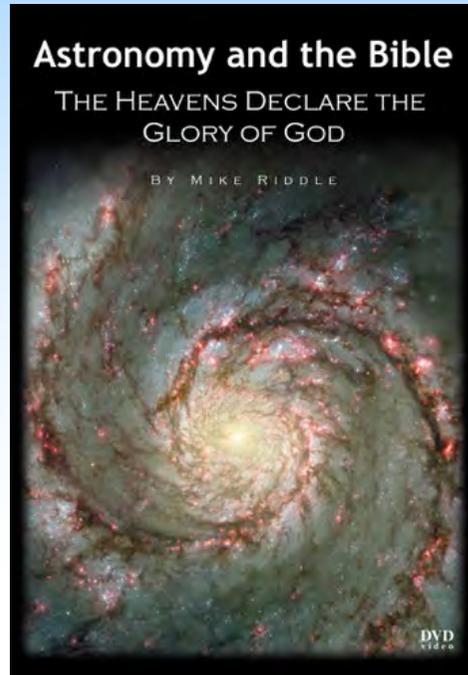
How to test a theory

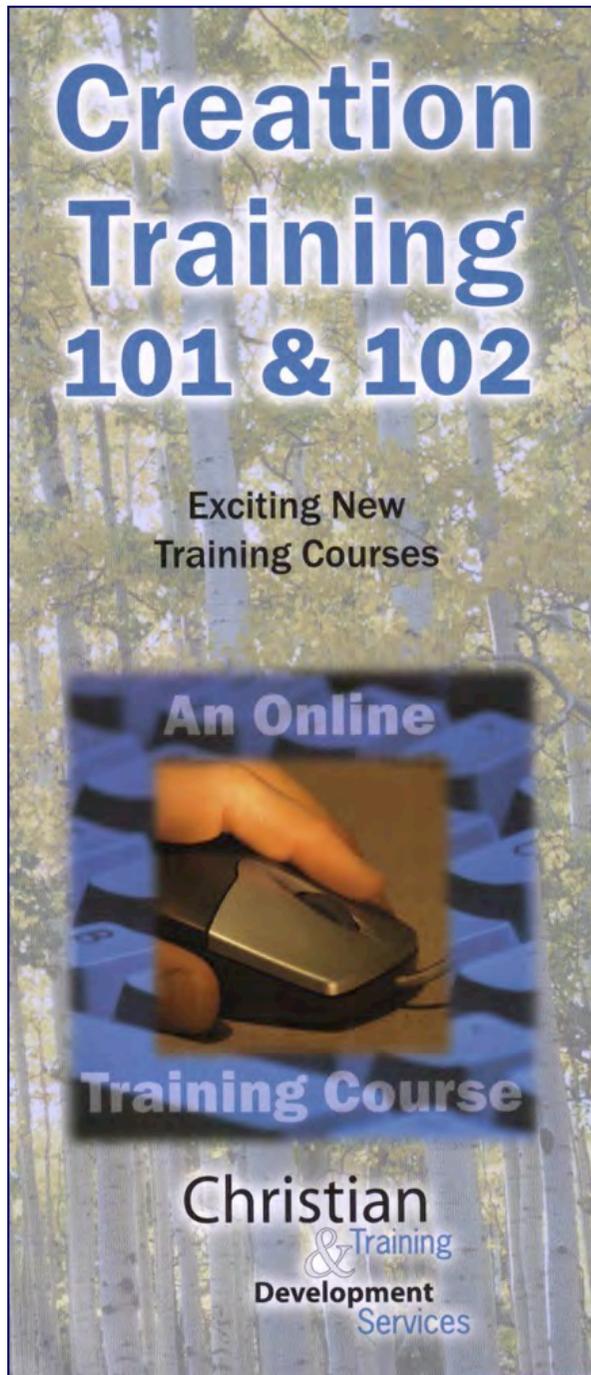
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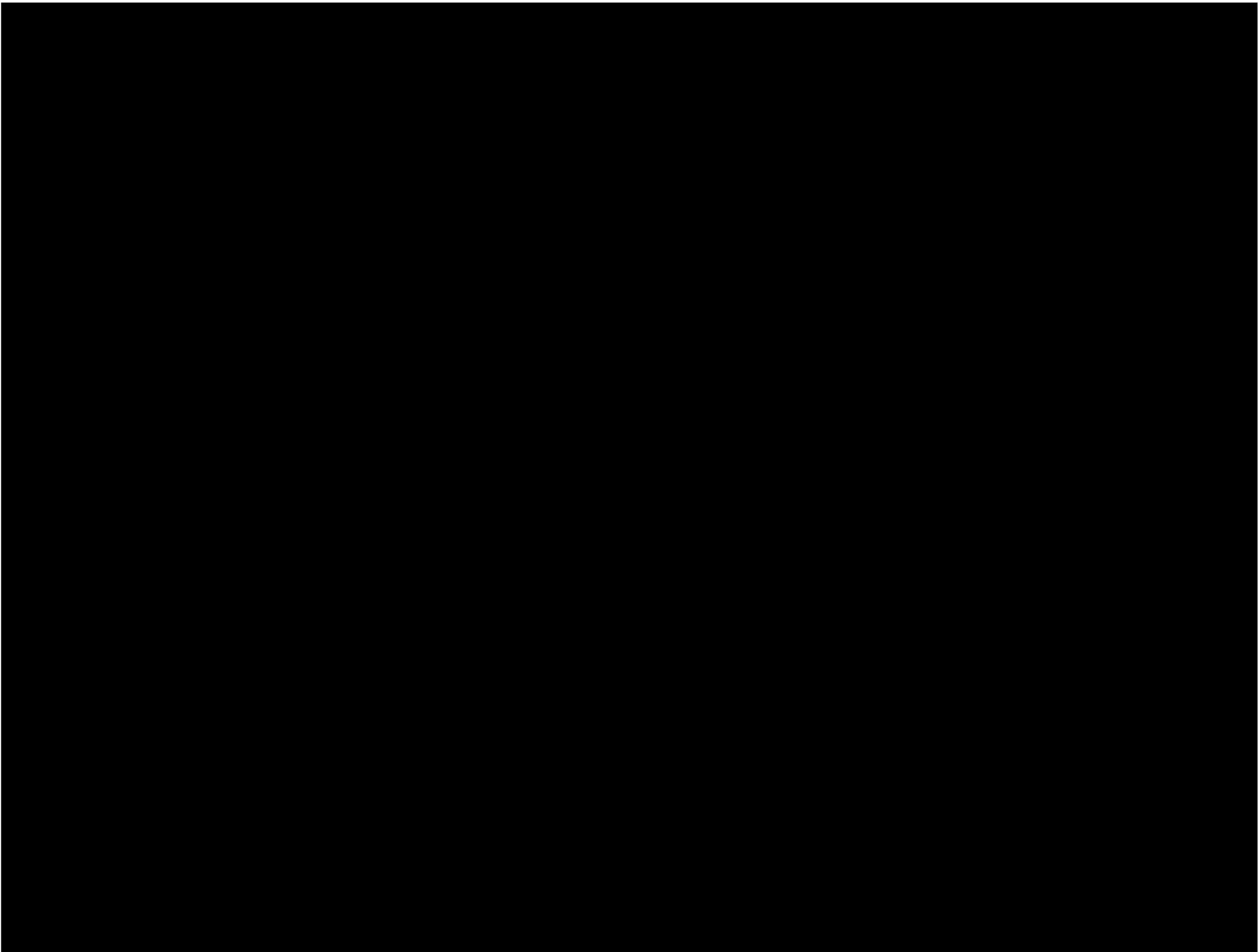
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