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**Origin of Life:**  
**It Matters Where You Start**



BIO 100 Principles of Biology

Cedarville University

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**TABLE 1-4 Major Worldviews and Philosophies**

**MODEL:**

**WORLDVIEW** → **PHILOSOPHY (PARADIGM)** → **SCHOLARSHIP**  
 [Foundation] → [Mediation] → [Expression]

**EXAMPLES:**

**THEISTIC WORLDVIEW > SUPERNATURALISM > CREATIONISM**  
**ATHEISTIC WORLDVIEW > NATURALISM > EVOLUTIONISM**

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**WORLDVIEWS, or IT MATTERS WHERE WE BEGIN!**

WORLDVIEW:	THEISTIC	ATHEISTIC
Resultant PHILOSOPHY:	SUPERNATURALISM	NATURALISM
Reality ->	Natural World is a <i>Reality</i>	...is the <i>only Reality</i>
Controlled by:	Supernatural Agent Whose Laws are Discoverable	Controlled by Natural Laws Operating by Time/Chance
Origins Hypotheses:	1) Intelligent Design/Purpose 2) Catastrophism	1) Time/Chance Evolution 2) Uniformitarianism
APPLICATION:	↓ INTERPRETATION OF NATURAL PHENOMENA ↓	

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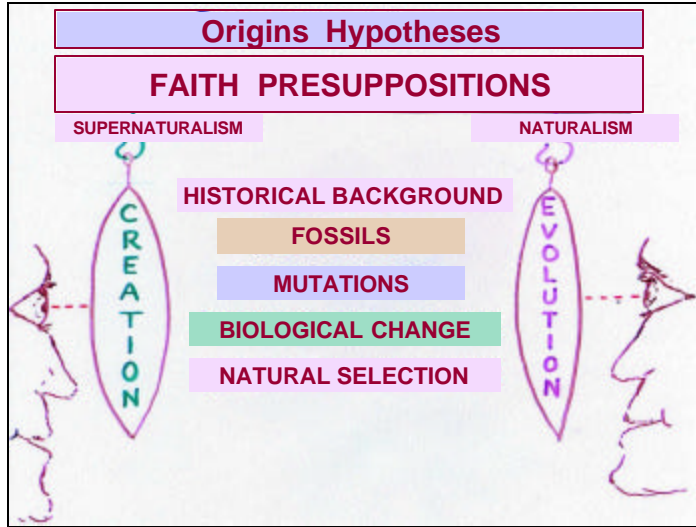
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**HISTORICAL BACKGROUND**

ARISTOTLE 350 BC	> LADDER OF LIFE > INANIMATE --> PLANT --> INVERTEBRATE --> VERT. --> MAN
RENAISSANCE 1400-1700	> "GREAT CHAIN OF BEING" > "FIXED LINKS" [Everything has its fixed place in the "order."]
LINNAEUS 1750	> CLASSIFICATION OF SPECIES > "FIXITY OF KINDS" -- BUT "HYBRIDIZATION"
<b>PALEY</b> 1790	> <b>DESIGN IN NATURE; "WATCHMAKER ANALOGY"</b>

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**HISTORICAL BACKGROUND**

<b>PALEY</b>	> <b>DESIGN IN NATURE; "WATCHMAKER ANALOGY"</b>
LAMARCK 1800	> SPECIES CHANGE OVER TIME e.g. VESTIGIAL ORGANS > FIG. 15-2
DARWIN 1859	> <i>ORIGIN OF SPECIES</i> > "NATURAL SELECTION CAN BRING PERFECTION"
MENDEL 1866	> PRINCIPLES OF HEREDITY > <b>TRAITS CONTROLLED BY INHERITABLE "FACTORS"</b> > <b>QUESTION: "HOW THEN COULD ORGANISMS EVOLVE?"</b>
NEO-DARWINISM 1900'S	> REVISION IN LIGHT OF GENETICS > EVOLUTION = CHANGE IN ALLELE FREQUENCIES IN GENE POOL

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Fossil Record		
	EVOLUTION	CREATION
A. ORIGINS HYPOTHESIS:	UNIFORMITARIANISM	CATASTROPHISM
B. SIGNIFICANCE OF GEOLOGIC COLUMN	RESULT OF GRADUAL DEPOSIT OF SEDIMENTS	RESULT OF SHORT-TERM CATAclysmic "FLOOD"; PRESERVED ORG. MATTER
C. TIME "SCALE"	MILLIONS OF YEARS	THOUSANDS OF YEARS
D. FOSSILS ARE RECORD OF...	GRADUAL EVOLUTION BY NATURAL SELECTION	A FEW CATASTROPHIC BURIALS

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Fossil Record		
D. FOSSILS ARE RECORD OF...	GRADUAL EVOLUTION BY NATURAL SELECTION	A FEW CATASTROPHIC BURIALS
E. TRANSITIONAL FORMS:		
> PREDICTION:	SHOULD FIND GRADUAL TRANSITIONS FROM SIMPLE -> COMPLEX	SHOULD FIND "GAPS" BETWEEN "KINDS"
> OBSERVATIONS:	1) "MISSING LINKS" - NO "TRANSITIONAL FORMS" 2) "EXPLOSIONS" - WHERE ARE "ANCESTORS?" 3) "LIVING FOSSILS" - EVOLUTION OR STASIS? 4) MASS EXTINCTIONS - NATURAL SELECTION?	

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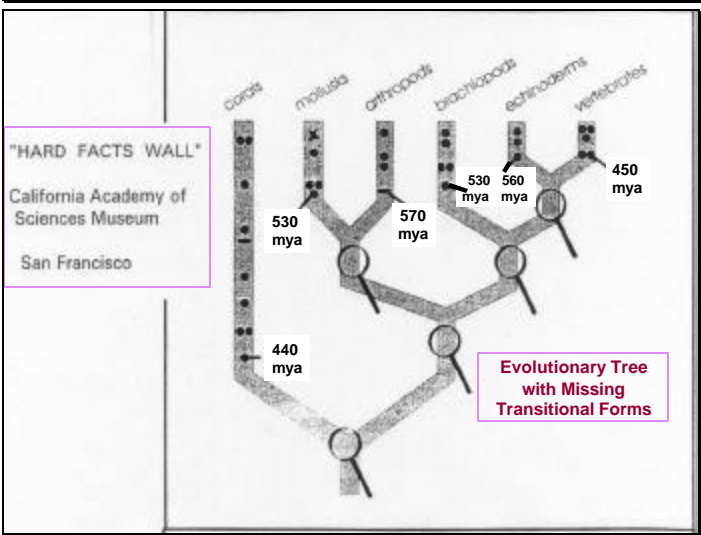
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## Fossil Record Supports Creation

D. FOSSILS ARE RECORD OF... GRADUAL EVOLUTION BY NATURAL SELECTION A FEW CATASTROPHIC BURIALS

### E. TRANSITIONAL FORMS:

> PREDICTION: SHOULD FIND GRADUAL TRANSITIONS FROM SIMPLE -> COMPLEX SHOULD FIND "GAPS" BETWEEN "KINDS"

> OBSERVATIONS: 1) "MISSING LINKS" - NO "TRANSITIONAL FORMS"

2) "EXPLOSIONS" - WHERE ARE "ANCESTORS?"

3) "LIVING FOSSILS" - EVOLUTION OR STASIS?

4) MASS EXTINCTIONS - NATURAL SELECTION?

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