

## **Judgment Day: Intelligent Design on Trial**

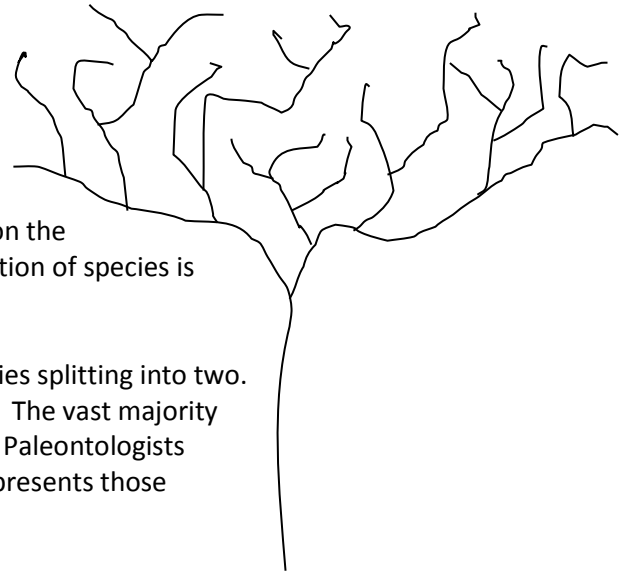
<https://www.youtube.com/watch?v=7HZzGXnYL5I>

- 1) What is the main claim of Intelligent Design advocates?
  
  
  
  
  
- 2) Kevin Padian claims that Intelligent Design is not a field of science and is not being actively researched by anyone. Look for evidence to support this claim throughout the video.
  - I. Connections between *Of Pandas and People* and the Discovery Institute (Hints: 24:30 “John loves Mary,” 1:25:00 Charles Thaxton , and 1:25:20 the original iteration of the text *Of Pandas and People*)
  
  
  
  
  
  
  
  
  - II. Scott Minick’s testimony (1:19:02)
  
  
  
  
  
  
  
  
  - III. The Paul Nelson interview (1:29:00)
  
  
  
  
  
  
  
  
  - IV. Michael Behe’s definition of science (1:30:12)
  
  
  
  
  
  
  
  
  - V. The Wedge document (1:32:34)

- 3) What is Alan Bonsell's (the school board member) opinion about the theory of evolution by natural selection, and how old does he think the Earth is?
  
- 4) What did the Supreme Court of the United States rule in 1987?
  
- 5) What is the Establishment clause of the constitution?
  
- 6) What was the school board member Bill Buckingham's opposition to the textbook used in Dover?
  
- 7) Who appointed Bill Buckingham to the curriculum review committee?
  
- 8) What did Darwin observe about all of the strange birds he collected from the Galapagos Islands?
  
- 9) What was Darwin shocked to find out about the strange birds he collected?
  
- 10) Describe the theory of evolution by natural selection.

\*\*\*MISCONCEPTION ALERT\*\*\*

The video shows a tree that represents all species on the planet today. This is a good analogy because we all know that every twig developed from the same initial seedling. The problem with this analogy is the trunk and branches. The ancestral species of all life on the planet was ONE species so a more accurate illustration of the evolution of species is on the right.



Notice that each branch is equally thin and represents a single species splitting into two. What isn't shown is all of the "pruning" that natural selection does. The vast majority of species that have ever evolved on this planet have gone extinct. Paleontologists estimate that 99% of species have gone extinct, so our tree only represents those species that are extant (alive today) and their ancestors.

- 11) What percent of the U.S. population does not believe the evidence for evolution?
- 12) Who do the science teachers think was responsible for the theft and burning of the mural that showed the evolution of humans, and why do they believe this person is responsible?
- 13) How did the Dover school board find the text book *Of Pandas and People*? (Hint: Buckingham, Thomas More Law Center, and the Discovery Institute)

\*\*\*MISCONCEPTION ALERT\*\*\*

Evolution by natural selection is NOT random. Think about what the word "selection" means. Nature selects blindly and without foresight or compassion, but it is NOT random. Those individuals that happen to be better suited for the environment they are born into are more likely to survive and therefore pass their traits on to the next generation.

- 14) The lawyer Phillip Johnson argued that the changes observed in the Galapagos finches can be explained by evolution by natural selection (unintelligent causes) but, he continues, these causes are insufficient to explain all of nature. He believes an intelligent cause is necessary to explain more complicated change. What do you think about this argument and why?

\*\*\*MISCONCEPTION ALERT\*\*\*

The first person to publish the theory of evolution by natural selection was Patrick Matthew in a book written in 1831, *Naval Timber and Arboriculture*, 28 years before Darwin's book *On the Origin of Species*. Alfred Wallace discovered the theory independently at about the same time as Darwin did. With or without Darwin the theory of evolution by natural selection would be the foundation of modern biology. Moreover, Darwin was wrong about many things and all college level biology students of today know more about Darwin's theory than he did.

15) What about Judge Jones made his presiding over the Dover Pennsylvania case significant?

\*\*\*MISCONCEPTION ALERT\*\*\*

Darwin's great-great grandson, Matthew Chapman, said he is living disproof of evolution because he is a screenwriter while Darwin wrote one of the most important books in the last 2000 years. This was meant as a compliment to Darwin and a joke at his own expense. Evolution has no goals or direction. It can't "see" the future, present, or past. Although there are general trends found throughout evolutionary history, there is nothing in the theory of evolution by natural selection that predicts that populations will get smarter or "better" over time. Individuals that just happen to be best suited to the environment they are in are more likely to survive and therefore have the opportunity to reproduce and pass their traits on to the next generation. Being stupid and having no talent could be an advantage; look at Brittany Spears and Paris Hilton.

16) What was the case about?

17) The way evolution by natural selection describes the origin of new species is illustrated above under the first misconception alert. Illustrate how Intelligent Design describes the origin of new species.

18) Why was Tiktaalik such a significant discovery? (Hint: Neil Shubin about minute 42)

19) Is the theory of evolution by natural selection absolute? Why or why not?

20) How does Dr. Levine describe a theory?

**\*\*\*MISCONCEPTION ALERT\*\*\***

Facts are facts and may be right or wrong. Hypotheses and theories explain facts. As a result, a hypothesis or theory can never become a fact. Laws are descriptions of natural phenomenon. They don't explain anything. They only tell us that certain things happen under certain conditions. Theories explain laws, so a theory can never become a law. A hypothesis is a more uncertain and/or a more limited explanation than a theory is.

21) Did Darwin understand heredity?

22) Why is Darwin's understanding about how traits are passed from generation to generation important?

23) What is a chromosome?

24) What is DNA?

25) What is a mutation?

26) What is the most "inflammatory" part of Darwin's theory?

**\*\*\*MISCONCEPTION ALERT\*\*\***

Humans are apes. Our closest living cousins are chimpanzees. This means that chimps are more closely related to humans than they are to the other apes (gorillas, orangutans, and gibbons). If chimps and gorillas are apes then we must be apes because chimps and humans are more like each other than either is like a gorilla.

27) What do you find on the ends of chromosomes?

28) What is a centromere?

29) Explain how chromosome #2 supports the theory of evolution by natural selection.

30) Illustrate the above explanation showing the telomeres of the chimp #12 and #13 chromosomes and the human #2 chromosome.

31) How is the theory of evolution by natural selection relevant?

32) What is wrong with a negative argument?

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33) What is an irreducibly complex system?

- 34) How does David DeRosier explain what he meant when he said, “more so than other motors, the bacterial flagellum resembles a machine designed by a human”.
- 35) What is the significance of the bacterium *Yersinia pestis*, which causes bubonic plague?
- 36) What is Behe’s claim about the scientific community’s explanation for how the immune system evolved?
- 37) How did the attorney, Eric Rothschild, respond to Behe’s claim about the lack of scientific explanations for the evolution of the immune system?
- 38) Has Intelligent Design been tested by Intelligent Design advocates?
- 39) Can supernatural explanations be tested?
- 40) Has evolution by natural selection been tested and is it being tested today?

**\*\*\*MISCONCEPTION ALERT\*\*\***

Humans did not evolve from monkeys. We share a common ancestor with monkeys just like we share a common ancestor with dogs, ticks, rose bushes, and every other organism on the planet. Saying humans evolved from monkeys is like saying you came from your cousin or your cousin came from you. You and your cousin share a common ancestor (a grandma or grandpa). You also share a common ancestor (a grandma or grandpa) with all of your classmates and me too.

- 41) What did Barbara Forest find after reading through 7000 pages of published and unpublished drafts of *Of Pandas and People*? (Hint: the definitions of creationism and intelligent design relative to the 1987 creationism case)
- 42) How did Barbara Forest prove that Intelligent Design is just a new label for creationism? (Hint: the drafts of the text *Of Pandas and People* before and after the 1987 creationism case)
- 43) The school board members Bill Buckingham and Alan Bonsell testified under oath that they didn't know where the *Of Pandas and People* textbooks came from. How did Bill Buckingham explain the fact that he didn't know where the books came from while he gave a personal check to Alan Bonsell for the cost of the books and that Alan Bonsell's father bought the books?
- 44) What happened to all of the school board members that voted for the Intelligent Design statement at the election after the trial?
- 45) What did Pat Robertson say to the citizens of Dover after they voted the school board members out of office?
- 46) What happened to Judge Jones after the trial?