

Name _____ Date _____ Period _____

What is the Evidence of Evolution? Video

What two claims does the Theory of Biological Evolution make? (0:15)

What are the Independent Lines of Evidence of Evolution? (0:43)

About how many living species exist today on Earth? (0:59)

Give me three examples of the Cetaceans? (1:08)

What do biologists tell us about the Cetaceans? (1:15)

Comparative Anatomy Line of Evidence

What does the Comparative Anatomy Line of Evidence refer to? (1:28)

Why are whales more closely related to land mammals than to fish? State four reasons (1:35)

How do whales breathe? (2:09)

True or False. Whales have hairs. (2:40)

What do whales have inside their front flippers? (2:53)

Draw a picture of the following (2:59)

Whale's Fin	Bat's Wing	Hippopotamus Leg	Human Arm

What do all four of these appendages have in common? (3:07)

What do modern whales have instead of back legs? (3:15)

To what do these bones almost look like? (3:24)

Embryology and Development Line of Evidence

What is embryology? (3:52)

What similarities do a dolphin embryo and a human embryo have? (3:59)

What do dolphins have on the front of their face in their early stage of development? (4:23)

What happens to these nostrils as the dolphin continues to grow? (4:34)

Fossil Record

When did the Basilosaurid whales lived? (5:03)

What is one way in which evolution tells us that Basilosaurid whales are intermediate species between a land mammal and a modern whale? (5:26)

What, like modern whales, do Basilosaurid whales have on the back end of their body? (5:40)

What is believed these legs were used for? (5:52)

What does Evolutionary Theory tells us? (6:01)

Give four reasons why the Maiacetus is considered a whale. (6:10)

Why do scientists state the idea that whales evolved from land creatures? (6:57)

DNA Comparisons

What do DNA molecules contain? (7:20)

Why is this important for scientists? (7:24)

Compared to other animals, which animal has been the closest genetic match to a whale's DNA? (7:35)

What does it mean if this genetic finding is correct? (7:49)

Why did the link surprised researchers? (8:00)

What are five strange features that whales and hippos share believed to have come from a common ancestor? (8:15)

What are bird wings considered? (9:09)

Birds evolved from _____.(9:23)

Bat wings evolved from _____. (9:28)

Humans share a common ancestor with _____. (9:36)

Mammals evolved from _____. (9:43)

The reptile-like creatures evolved from _____. (9:45)

The amphibian-like creatures evolved from _____. (9:50)

Fish share a common ancestor with _____. (9:54)

What do all these facts we learned about in this video tells us at the end? (10:02)