

How do organisms differ from each other?	Organisms differ from each other based on their adaptations.
What are adaptations?	Adaptations are structures or behaviors that help a species find food, protect itself, or move from place to place. An adaptation helps a species survive and reproduce.
What is a species?	A group of closely related organisms that are very similar to each other and are usually capable of interbreeding and producing fertile offspring.
What is evolution?	The process in which populations accumulate inherited changes over time.
Can individuals adapt and evolve?	Individuals cannot adapt and evolve. Only populations can adapt and evolve.
What are fossils?	Fossils are the solidified remains or imprints of once-living organisms are found in layers of sediments and rock.
What is the fossil record?	A historical sequence of life that supplies evidence about the order in which evolutionary changes have occurred.
How are fossil records read?	Fossils found in upper levels resemble present-day organisms. Deeper level fossils are earlier forms of life and resemble less to present-day organisms.
What are gaps in the fossil record?	Conditions needed for fossil formation are rare, making fossils difficult to find.

What are vestigial structures?	Vestigial structures are remnants of once useful structures.
what is an example of a vestigial structure?	Tail bones (Coccyx) in humans, hind limbs in whales.
How does comparing skeletal structures show evidence of evolution?	A homologous structure is an organ or bone that appears in different animals with similar anatomy demonstrating descent from a common ancestor. When very different animals have bones that appear very similar in form or function and seem to be related.
What is an example of homologous structures?	Human arms, cat legs, dolphin fins, and bat wings are all similar in structure and function.
How does comparing DNA from different species show evidence of evolution?	All organisms have DNA. The closer two organisms are related the more similar their DNA sequences are.
How does comparing embryonic structures show evidence of evolution?	Vertebrate embryos resemble each other despite eventually growing into very different adult forms.

Structure and Function

Name \_\_\_\_\_

Concept 1: How Do Organisms change over time?