STAAR EOC Biology - Study Resources and Practice Questions

Scientific Evidence of Common Ancestry

TEKS

- B.7.A - Analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental.
- B.7.B - Analyze and evaluate scientific explanations concerning any data of sudden appearance, stasis, and sequential nature of groups in the fossil record.
- B.7.G - Analyze and evaluate scientific explanations concerning the complexity of the cell.

Textbook Chapters

- Chapter 10

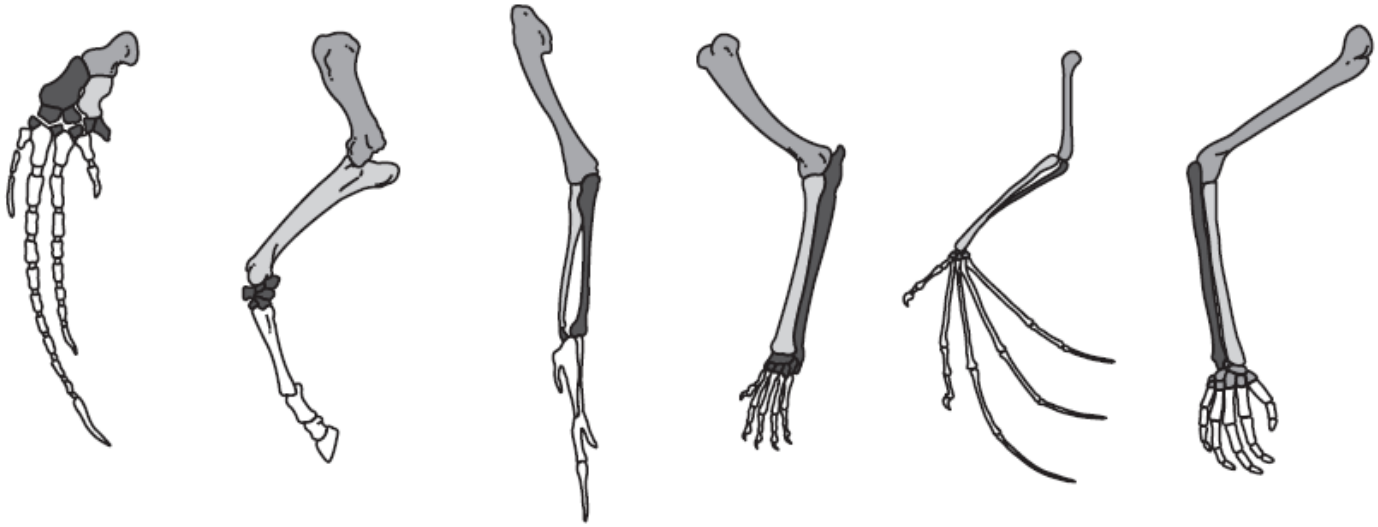
Videos

- Khan Academy Heredity and Evolution Videos (6 videos)
    - https://www.khanacademy.org/science/biology/her/evolution-and-natural-selection/v/introduction-to-evolution-and-natural-selection
- Bozeman Science Videos with Mr. Anderson
    - Natural Selection
        - https://www.youtube.com/watch?v=R6La6_kIr9g
    - Essential Characteristics of Life
        - https://www.youtube.com/watch?v=bILvTe2_FEE

Other Resources

- Wikipedia article: Common descent
    - https://en.wikipedia.org/wiki/Common_descent
- Website article: Evidence of Evolution
    - http://www.darwinwasright.org/common_descent.html

52 The limbs of several organisms are shown in the illustrations below. Scientists sometimes compare the limbs of these organisms to look for evidence of common ancestry.



Whale Horse Bird Cat Bat Human

These limbs provide evidence of common ancestry because they —

F have the same basic structure

G perform the same function

H are the same size

J are parts of mammals

42 Genome maps provide the DNA sequences of chromosomes. Some scientists have compared the genome maps of a hedgehog and a sloth. What do these genome maps allow the scientists to determine?

F The color patterns of the offspring of each species

G How much the size ranges of the two species differ

H The methods of protein synthesis that each species uses

J How closely related the two species are to each other