



High School Science Virtual Learning

College Biology

Chapter 17 Recap Part 2

May 19, 2020



High School College Biology Lesson: May 19, 2020

Objective/Learning Target:

Students will be able to identify the key characteristics of Echinoderms and Chordates and discuss the key events in Human Evolution.

Let's Get Started:

1. Which major arthropod group is mainly aquatic? Which is most numerous?
2. Flatworms are the simplest animals to display a body plan that is _____.



Answers:

1. Crustaceans; insects
2. Bilaterally symmetric

Lesson Activity:

1. Read over pages 22-42 of the Chapter 17 Notes. ([Linked Here](#))
2. Watch this Crash Course video on [Chordates](#).
Watch this Crash Course video on [Human Evolution](#).



Practice:

1. List and describe the two major types of living fish.
2. Amphibians, reptiles and mammals are all called what? Why?
3. What are the three major groups of mammals?

Practice Answers:

1. Cartilaginous fish have flexible skeletons made of cartilage and include sharks and rays. Bony fish have a skeleton reinforced by hard calcium and include ray-finned and lobe-finned fishes.
2. They are called tetrapods. Which means that they all have four feet.
3. Monotremes, marsupials, and eutherians. Monotremes lay eggs, marsupials have a pouch and eutherians have a placenta.

More Practice:

1. The oldest group of tetrapods is the _____.
2. Match each of the following animals to its phylum
 - a. Human
 - b. Leech
 - c. sea star
 - d. Lobster
 - e. sea anemone
 1. Echinodermata
 2. Arthropoda
 3. Cnidaria
 4. Chordata
 5. Annelida
3. During our early embryonic development, what four features do we share with invertebrate chordates such as lancelets?



More Practice:

4. Which hominin species was the first to walk upright?
Which was the first to spread beyond Africa?
5. What are two defining characteristics of mammals?

More Practice Answers:

1. Amphibians

- | | | | |
|----|----------------|---|------------------|
| 2. | a. human | → | 1. Echinodermata |
| | b. leech | → | 2. Arthropoda |
| | c. sea star | → | 3. Cnidaria |
| | d. lobster | → | 4. Chordata |
| | e. sea anemone | → | 5. Annelida |

3. 1) dorsal, hollow nerve cord; 2) notochord; 3) pharyngeal slits; 4) post-anal tail

4. *Australopithecus afarensis*; *Homo erectus*

5. Mammary glands and hair



Review Tools:

-[Kahoot 3](#)

-[Kahoot 4](#)

-Mr. Anderson [Video](#) about animals

-Visit the Natural History Museum's page on [Human Evolution](#).