

Advanced Zoology Challenge

Zoology · Practice Test · 12 Questions

1. Which specialized organ do sharks use to detect the electromagnetic fields produced by the muscle contractions of their prey?

- A) Lateral line
- B) Ampullae of Lorenzini
- C) Nictitating membrane
- D) Tapetum lucidum

2. What is the unique biological process by which a marsupial, such as a kangaroo, is born at an extremely premature stage of development?

- A) Oviparity
- B) Diapause
- C) Altricial birth
- D) Metamorphosis

3. Which group of birds possesses a specialized esophagus chamber called a 'crop' primarily used for what purpose?

- A) To store food temporarily
- B) To filter water for salt
- C) To produce heat for incubation
- D) To store stones for digestion

4. What is the primary function of the 'tapetum lucidum' found in the eyes of many nocturnal mammals?

- A) To filter harmful UV rays
- B) To reflect light to improve night vision
- C) To allow color perception in darkness
- D) To protect the eye from dust

5. Which insect order is characterized by having 'complete metamorphosis,' consisting of egg, larva, pupa, and adult stages?

- A) Orthoptera
- B) Hemiptera
- C) Coleoptera
- D) Blattodea

6. In the classification of animals, which subphylum includes all vertebrates characterized by a dorsal nerve cord and a notochord?

- A) Craniata
- B) Urochordata
- C) Cephalochordata
- D) Tunicata

7. What is the scientific term for the shedding of the exoskeleton in arthropods such as crabs and insects?

- A) Estivation
- B) Ecdysis
- C) Hibernation
- D) Autotomy

8. Which of these animals is considered a 'monotreme,' a unique mammal that lays leathery eggs instead of giving birth to live young?

- A) Wombat
- B) Koala
- C) Platypus
- D) Sugar glider

9. What is the primary respiratory organ used by most aquatic mollusks to extract oxygen from water?

- A) Spiracles
- B) Ctenidia
- C) Book lungs
- D) Tracheae

10. Which biological mechanism allows some reptiles, like certain geckos, to voluntarily shed their tail to escape a predator?

- A) Autotomy
- B) Regeneration
- C) Aposematism
- D) Parthenogenesis

11. What is the defining feature of the 'cetacean' order that distinguishes them from fish?

- A) They have gills
- B) They have horizontal tail flukes
- C) They are cold-blooded
- D) They lack lungs

12. Which chemical substance is responsible for the dark pigment in the feathers and fur of many animals?

- A) Chlorophyll
- B) Hemoglobin
- C) Melanin
- D) Keratin