

_____ All of these things are true about birds **except**:

- A. They have feathers
- B. They are bipedal
- C. They have nucleated red blood cells
- D. Males are heterogametic
- E. Modern birds are toothless

One characteristic of modern birds is that they have large brains (relative to body size). Explain one reason why large brains are important for modern birds.

_____ Birds belong to which subphylum?

- A. Aves
- B. Eukarya
- C. Vertebrata
- D. Chordata
- E. Animalia

_____ True or False (write **T** or **F** in the blank): Birds, just like mammals, are adapted to every type of habitat on the face of the earth, including some species that nest on the open ocean.

_____ Pelicans are in which Order?

- A. Pelecaniformes
- B. Tinamiformes
- C. Coliiformes
- D. Anseriformes
- E. Ciconiiformes

_____ Penguins are in which Order?

- A. Apodiformes
- B. Sphenisciformes
- C. Columbiformes
- D. Coliiformes
- E. Coraciiformes

The diversity that we see in living organisms is derived largely from a process that Charles Darwin and Alfred Russell Wallace proposed in the 19th century. What is the name of the process?

Archaeopteryx lithographica is an important fossil in understanding the early history of birds. Name one “reptilian” characteristic it has that distinguishes it from modern birds?

____ There are two competing ideas concerning the relatives of modern birds. One hypothesis is that birds came from theropod dinosaurs. What is the other suggested ancestral group?

- A. Sauropod dinosaurs
- B. Ornithischian dinosaurs
- C. Thecodonts
- D. Crocodylians

Early birds diverged into Enantiornithines and Ornithurae. When did the Enantiornithines go extinct?

- A. End of the Jurassic Period
- B. End of the Triassic Period
- C. End of the Tertiary Period
- D. End of the Cretaceous Period

Briefly explain the Arboreal Theory for the evolution of flight.

____ This era is known as the Age of Birds and Mammals (and began 65 million years ago).

- A. Cenozoic
- B. Mesozoic
- C. Paleozoic

____ True or False (write **T** or **F** in the blank): In this → phylogeny, a group of just C and D would be monophyletic.

Define **Parsimony**
