

Complex Vertebrates

Study Guide Quiz 14

REMEMBER:

Unicellular – single celled organism

Multicellular – many cells in the organism

Prokaryote – no nucleus in the cell

Eukaryote – nucleus in the cell

Autotroph – organism must make it's food

Heterotroph – organism must eat food

ANIMALS = Multicellular, Eukaryotes that are Heterotrophs

Invertebrates – animals that LACK a backbone

- **Phylum Porifera** = sponges
- **Phylum Cnidaria** = jellyfish, coral, sea anemones, hydra
- **Worms: Phylum Platyhelminthes** = flatworms; **Phylum Nematoda** = round worms; **Phylum Annelida** = segmented worms
- **Phylum Mollusca** = mollusks (gastropods, bivalves, cephalopods)
- **Phylum Arthropoda** = arthropods (insects, arachnids, crustaceans, centipedes, millipedes)
- **Phylum Echinodermata** = echinoderms

Vertebrates – or **CHORDATES**: have a notochord, dorsal nerve cord and gill slits during development

- **Fishes** – jawless, cartilaginous, bony
- **Amphibians** – frogs, toads, salamanders, newts, caecilians

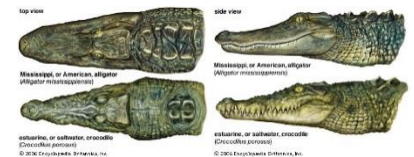
Reptiles

Reptiles - Basic Characteristics

- **Vertebrates**
- **Ectothermic** – internal body temperature controlled by the environment; “cold blooded”
- **Scales** – cover the skin of reptiles; vary in size, shape, and structure are strong and rigid – to prevent loss of water
- **Lungs** – to live on land, an animal needs lungs to get oxygen out of the air and into the blood
- **Heart** has three chambers
- **Amniotic Egg** (does not require a water environment) that has a **Leathery Shell**; some have live birth

Crocodylians

- large, predatory, semiaquatic reptile distinguished by long jaws, short legs, and a powerful tail
- Examples: crocodiles, alligators, caiman



Snakes

- a long limbless reptile that has no eyelids, a short tail, and jaws that are capable of considerable extension; some snakes have a venomous bite
- Examples: ring-neck snake, garter snake, rattlesnake, python, anaconda



Lizards

- a reptile that typically has a long body and tail, four legs, movable eyelids, and a rough, scaly, or spiny skin
- Examples: fence lizard, green iguana, komodo dragon, geckos, chameleons, skinks



Turtles

- a reptile that is enclosed in a scaly or leathery domed shell (the backbone is modified to make the shell) with four legs or the marine turtles have flippers for legs
- Examples: box turtle, tortoise, snapping turtles, loggerhead turtle



Birds

Birds – Basic Characteristics

- **Vertebrates**
- **Lungs** – to live on land, an animal needs lungs to get oxygen out of the air and into the blood
- **Endothermic** – internal body temperature controlled by the metabolism of the animal; “warm blooded”
- **Heart** has four chambers
- **Feathers** – flat appendages growing from a bird's skin and forming its plumage, consisting of a partly hollow shaft fringed with vanes of barbs;
 - **TYPES of Feathers:**
 - flight feathers (wings and tail),
 - contour feathers (give shape and color);
 - down feathers (little to no shaft; for warmth)
- **Wings** – specialized paired appendages that enable birds to fly
- **Amniotic Egg** (does not require a water environment) **that has a Hard Shell**

Game Birds

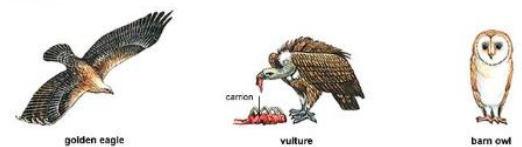
- good runners (legs are massive) but they cannot fly long distances (wings are short and round)
- Examples: partridges, pheasants, quail, grouse, pigeons, doves, turkey



Preying Birds

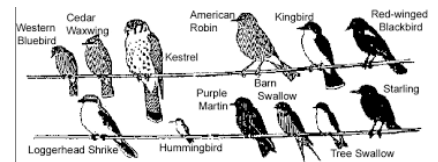
- predators: kill and eat mice and other smaller animals
- very strong, hook-like beak; feet have curved and pointed claws; vision is very sharp
- Examples: vultures, kites, eagles, falcons, owls, osprey

Birds of prey



Perching Birds or Song Birds

- largest group of birds
- sit on a tree, their feet grasp the branch of the tree so that they cannot fall off the branch
- Examples: larks, swallow, finches, house sparrow, crow and blackbird



Water Birds and Shorebirds

- usually good flying birds, depend on water habitats for survival
- Examples: albatross, shearwater, cranes, coots, rails, flamingos, grebes, herons, storks, loons, ducks, geese, pelicans, cormorants, sea gulls



Flightless Birds

- can run or swim but they cannot fly; body is suited for running, diving or swimming
- usually are large-sized and generally lack tail feathers.
- Examples: ostriches, rhea, emu, kiwi, and penguin.
 - Ostrich is the largest living bird.

