# Chapter 13 SRQs:

# Vertebrates I: Systems, Fish, Amphibians, Reptiles

## 13A

What two substances may form a vertebrate’s skeleton? Bone or cartilage

The series of bones that supports the body and protects the spinal cord is called what? Vertebral column

What main advantage is there to being endothermic? Your body heat remains stable

## 13B

What happens to blood in gills? In what kind of blood vessel does this happen? Blood becomes oxygenated inside the gills’ capillaries

List the two parts of a central nervous system. Brain and spinal cord

List the parts of the peripheral nervous system. Nerves, sensory receptors, sensory organs

What are an organism’s reactions to stimuli controlled by? The central nervous system

## 13C

2. What organ helps some fish maintain their position at a constant depth? Swim bladder

5. What term do we use to describe how fish reproduce? spawning

6. What group of fish contains the most species? Bony fish

7. What kind of fish are Sharks? Cartilaginous fish

8. Do all fish have scales? no

## 13D

Why are amphibians called “amphibians”? because *amph* means both, and amphibians live in both land and water

Besides gills and lungs, what organ can amphibians use in gas exchange? Their skin

Why are most amphibians found near water? They lay eggs there, near the water’s surface

Name three kinds of amphibians. Frogs, toads, salamanders, newts, caecilians

How are hibernation and estivation similar? How are they different? They are both periods of inactivity when the body shuts down except for vital organs to avoid extreme temperatures; hibernation is in the winter while estivation is in the summer

## 13E

1. Periodic shedding of skin by reptiles is called: molting
2. List three similarities and three differences between snakes and lizards. They are both reptiles, lay eggs, have scales, molt; lizards have legs, ear openings, and moveable eyelids

## Chapter Review

1. How does the number of heart chambers differ in the various groups of vertebrates? Fish have two, reptiles and amphibians have three, and birds and mammals have four
2. What two gases are exchanged in gills and lungs? Oxygen (in) and carbon dioxide (out)

8. The organs which filter waste from vertebrates’ blood are called what? kidneys

12. Which group of vertebrates is the only group to undergo metamorphosis? amphibians

## Vocabulary 13: (type them up here or bring in your flashcards)

Endoskeleton v. exoskeleton

Bone

Cartilage

Endothermic v. exothermic

Central nervous system (and parts)

Peripheral nervous system (and parts)

Molting

Three Types of Fish

Amphibians

Reptiles

Major parts of the circulatory system

Parts of the respiratory system (including gills, trachaea)

Major organs in the digestive system

Organs of the excretory system