## **Biology 102 Exam II Study Guide**

Which phylum includes the largest number of species?

All animals are made up of cells considered to be what type of cell?

What are the basic stages in a typical animal life cycle?

There are two types of development in embryos. What is the type where the embryo resembles the adult form? What is the type where the embryo does not resemble the adult form?

What does it mean for an organism to be truly multicellular?

What does it mean for an organism to be colonial?

What is the cell formed by the fertilization of an egg by a sperm called?

What group of organisms represents the Phylum Porifera?

What group of organisms represents the Phylum Cnidaria?

Cnidarians are also called the "stinging celled" animals because of a special cell that they have that has a stinger built into it. What do we call this cell?

The Cnidarians have two separate body forms, what are they?

What group of organisms represents the Phylum Platyhelminthes?

What group of organisms represents the Phylum Nematoda?

What group of organisms represents the Phylum Mollusca?

What group of organisms represents the Phylum Annelida?

What group of organisms represents the Phylum Arthropoda?

What are the major categories of Mollusk?

What group of organisms represents the Phylum Echinodermata?

What group of organisms represents the Phylum Chordata?

What are examples of a chordate but not a vertebrate?

What type of body symmetry does sponges and jellyfish possess?

The Phylum Platyhelminthes ushered in a new type of body symmetry called what?

Phylum Annelida has a fundamentally important characteristic, they were the first to show real serial repetition of body parts called. What do we call this?

The Water Vascular System is a unique characteristic of which Phylum?

What are some characteristics shared by all chordates?

Do animal cells have a cell wall?

What do we call the type of digestive system that lacks two openings?

For those animals that lack a complete digestive tract, what do we call the single large digestive cavity found in Phyla like the Cnidaria and Platyhelminthes?

What type of digestive system one do humans have?

What is the process called whereby food is broken down into smaller and smaller pieces?

What is the process called whereby food particles are taken in through the gut wall into the blood stream?

What are the principle organs of the digestive system?

What are the accessory organs of the digestive system?

What do we call the small flap of tissue at the top of the esophagus that prevents food from going down the windpipe?

What do we call the rhythmic contractions of smooth muscle in the gut wall that moves food through the digestive tract?

What are the principle organs of the respiratory system called?

What are the small air sacs in the lungs where actual gas exchange occurs called?

What do we call the permanent air left behind in the lungs after we exhale?

What is the most important muscle involved in respiration?

Is breathing purely an autonomic process with no possible conscious control over it?

What are the primary organs of the excretory system?

What are the actual units that carry out filtration called?

What are the secondary organs of the excretory system?

Humans have two distinct circulatory routes in the body. What are they?

What is the principle vessel types found in the circulatory system?

What is the principle organ in the circulatory system?

How many chambers does the heart have?

What part of this organ is responsible for delivering blood to the systemic body?

How many valves does the heart have?

What are the three main cell types found in blood?

Which aspect of the body's immune system is charged with defending against unknown agents or new infections?

Which aspect of the body's immune system is charged with defending against known or previously encountered agents?

The inflammatory response is part of which defense mechanism of the body?

What do we call foreign materials (whether they are bacterial, viral or chemical) that can incite an immune response?

What are the chemicals produced by white blood cells in response to a foreign invader that can either kill the invader or tag it for elimination by other white blood cells?

What do we call it when our own immune system attacks our own tissues and cells?