

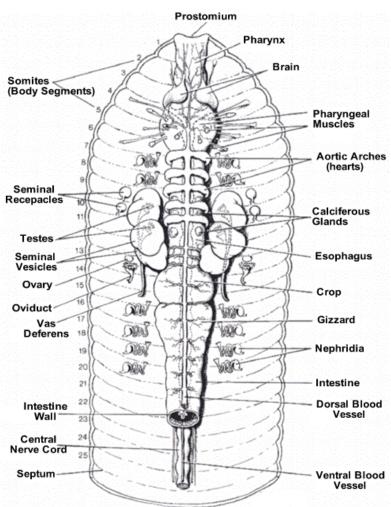
Kingdom: Aminalia

Phylum: Annelida

(means "little rings")



- Annelids segmented worms earthworms, leeches,
- Bodies are literally broken up into segments, partitioned by thin pieces of tissue called septa. Each segment has a piece of the circulatory, nervous, excretory, and digestive systems running through it.
- Segmentation seems pretty tame, but it's actually a really useful development each segment is pretty independent of the rest since each one has a piece of the four important systems in it. If you lose a few segments, you're probably still OK. (And if you're really cool, you can regenerate them! Hey, why not? Each segment is pretty much the same, so you only need one set of genes in order to replace anything you've lost!)



- We finally have a closed circulatory system – much more efficient, since we no longer have oxygenated and deoxygenated blood sloshing together.
- Annelids are our first true coelomates (their internal body cavity is lined **on both sides** with mesodermal tissue). The coelom is filled with air and fluid, so it provides a nice, cushioned space for all those important internal organs.
- Most annelids are hermaphrodites. Notice the testes and the ovaries in the picture.
- Annelids have what's known as a <u>hydrostatic</u> <u>skeleton</u>. Imagine squeezing a long water balloon –

that's how they move!