Life Science Exam 5 Study Guide

* Review all Powerpoints and chapters
* Review all the basics of the organ systems we discussed
* Review transplantation. What organs are able to be transplanted?
* What is the level of organization in an individual? – start with the cell and end with the individual
* What are the 4 adult tissues?
  + Review functions
  + Review where you find these tissues in the body
* Respiratory system
  + What are aveoli?
  + What is hemoglobin? Can carbon monoxide bind hemoglobin?
  + What are the consequences of cigarette smoke exposure?
* Cardiovascular system
  + What causes a heart attack?
  + Trace a drop of blood through the heart – start at the right atrium
* What are viruses?
* What are prions?
* Do antibiotics work on viruses?
* What are pathogens?
* What composes the 1st line of defense in the immune system? 2nd line of defense?
* What is humoral immunity? What is cell mediated immunity?
* Why are memory cells in the immune system important?
* What cell type does HIV kill?
* What are antibodies? What cell produces antibodies?
* What is asexual reproduction?
* How much genetic information do gametes have?
* Where are eggs produced? (remember that egg maturation happens in the follicle). Where is sperm produced?
* Remember that sperm production occurs throughout a males lifetime, a female has all of the eggs she will have before her birth (they start development when the female is a fetus)