Life Science

Study Guide for Exam 1

* Read Chapters 1-3
* Review all Powerpoints
* Complete the activities on the website: [www.jcapers-irsc.weebly.com](http://www.jcapers-irsc.weebly.com)
* What is the scientific method?
* What is an hypothesis?
* What is scientific theory?
* In an experiment, what are dependent variables? Independent variables?
* What is correlation?
* What is a placebo?
* What is a double blind experiment? What is bias?
* When looking for scientific information, what are primary sources? Secondary sources?
* What is anecdotal evidences?
* Remember that when we say results are significantly significant, we mean that the result is unlikely to be due to chance alone
* What is pH?
* What are solvents? What are solutes?
* Atoms: what is the charge of an electron? Neutron? Proton? What is found in the nucleus of an atom?
* What is homeostasis?
* What are important characteristics of water? Is water a polar molecule? What are the bonds that hold water molecules together as a result of this polarity?
* What does it mean to be hydrophobic?
* Review the macromolecules we talked about: carbs, proteins, lipids and nucleic acids
* What are enzymes?
* What is the difference between prokaryotic and eukaryotic cells?
* Review the organelles/parts of the cell and their functions (chloroplasts, mitochondria, ribosomes, endoplasmic reticulum, lysosomes, etc)
* What is dehydration?
* Why are whole foods better than processed foods?
* What are unsaturated fats? Saturated?
* What do vitamins do for the body? What vitamin can our cells synthesize?
* What are macronutrients? Micronutrients?
* What is BMI? What about the BMI might make an individual’s reading not correct?
* What role does insulin play in the body?
* What are the 2 types of diabetes?
* What are 2 eating disorders?