Ms. Rinaldo - AP Biology

CHAPTER 1-4 STUDY GUIDE

Chapter 1 –

* Properties of all living things
* Biological organizational levels of living things
* How organisms interact with their environment, exchanging matter and energy.
* DNA structure and function
* Prokaryotic and Eukaryotic cells\*
* Organic molecules
* Feedback mechanisms\*
* Evolution and common ancestry

Chapter 2 –

* Atomic structure
* Elements and Compounds
* Chemical Bonds\*

Chapter 3 –

* Polarity and Hydrogen Bonding
* 4 emergent properties of water \*
* Hydrophylic and Hydrophobic molecules
* pH scale – and examples of substances
* Hydrogen Ions and Hydroxyl Ions as related to the pH scale

Chapter 4 –

* Organic Chemistry
* The carbon atom
* What makes carbon unique, and able to form diverse molecules \*
* Stanley Miller’s experiment (Figure 4-2, p. 59) \*
* Importance of functional groups ( you do not need to memorize all the structures)

\*means these are possible topics for short answers and essays. Review them well.