

Chapter 1 – An Introduction to the Chemistry of Life

Objective	In-text reading	Pre-class materials/activities	In-class materials/activities	Practice problems from text
1. Identify and explain properties of various functional groups found in biomolecules.	1.a	What are functional groups (video) Introduction to the chemistry of life (video)		5 th Ed: 1, 2 4 th Ed: 1 3 rd Ed: 1
2. Identify and explain the various biomolecules found in the cell.	1.b	Biomolecules (video)		
3. Review the architecture of the eukaryotic cell.	2	Biology: Cell Structure (video)		5 th Ed: 16 4 th Ed: 2 3 rd Ed: 2
4. Review thermodynamic principles and apply them to a biological context	3.a – 3.d	Introduction to the Chemistry of life (video) Reversible Reactions (Phet Simulation)	S.22 – Understanding complex chemical systems in living organisms	5 th Ed: 6, 8, 10, 12, 15, 23 4 th Ed: 5, 10, 11, 14, 17 3 rd Ed: 5, 13, 10, 14, 11, 12
5. Distinguish between the terms equilibrium and steady state and use them appropriately when describing biochemical systems	3.e	Introduction to the Chemistry of life (video)	S.22 – Understanding complex chemical systems in living organisms	5 th Ed: 9 4 th Ed: Review in class activity 3 rd Ed: Review in class activity