Chapter 2 - Water

Objective	In-text reading	Pre-class materials/activities	In-class materials/activities	Practice problems from text
1. Review the physical and chemical properties of water and explain how these properties can drive biomolecular behavior	2.1-2.2	Properties of water (video) Ch. 2 Water (video)	S1 – Chemistry in an aqueous environment	5th Ed: 2, 7 4th Ed: 5, 7 3rd Ed: 3, 6
2. Review the principles of weak acids and basis, and explain how buffers work in the body.	2.2	Acid-Base equilibria and buffers (video) Ch. 2 Water (video)	S1 – Chemistry in an aqueous environment	5th Ed: 9, 11 4th Ed: 13, 15 3rd Ed: 7, 8
3. Apply the Henderson-Hasselbalch equations to calculate various properties of buffers	2.2	Buffer solution pH calculations (video) Ch. 2 Water (video)	S1 – Chemistry in an aqueous environment	5th Ed: 13, 15, 31 4th Ed: 17, 19, 25 3rd Ed: 9, 12, 17
4. Explain and describe factors that govern the characteristics of biomolecules in aqueous solutions.	2.1	Ch. 2 Water (video)	S1 – Chemistry in an aqueous environment	5th Ed: 1, 19, 21 4th Ed: 1 3rd Ed: 1