

C.P. Biology: Unit Two Calendar 2008-2009

Chemistry in Biology & Cellular Structure and Function

Date	Class Items	Homework: always review
9/16-17	1. Unit One Exam (Principles of Biology)	1. Begin reading CH 6 and defining the listed terms
9/18-19	1. Notes (Obj. 1-4) 2. Science Notebook 6.1-6.2	1. Continue working on the CH 6 terms 2. Finish Science Notebook 6.1-6.2 3. Study for Q2-1 (Obj. 1-4)
9/22-23	1. Q2-1 (Obj. 1-4) 2. Notes (Obj. 5-7) 3. Lab: Investigating Acids and Bases	1. Study for Q2-2 (Obj. 5-7) 2. Complete Lab Analysis Questions 3. Finish CH 6 terms 4. Start unit Study Guide
9/24-25	1. Collect CH 6 terms and Investigating Acids and Bases Lab 2. Q2-1 (Obj. 5-7) 3. Notes (Obj. 8-9) + chart 4. Chemistry of Life Handout	1. Study for Q 2-3 (Obj. 8-9) 2. Work on Unit 2 Study Guide 3. Finish Chemistry of Life Handout
9/26-29	1. Collect Chemistry of Life Handout 2. Q2-3 (Obj. 8-9) 3. Notes (Obj. 10 – 11) & Microscope diagram 4. Lab: Using a Microscope	1. Finish ALL Study Guide questions related to Unit 6 #1-20 2. Be sure you lab is finished 3. Begin reading CH 7 and define the listed terms
10/1-2	1. Collect Microscope lab 2. Notes (Obj. 12-13) and cell diagram 3. Lab: Comparing Plant and Animal Cells	1. Keep working on CH 7 Terms 2. Start working on Unit 2 Study Guide questions related to CH 7 # 21-36 3. Study for Q2-4 (Obj. 14-15) 4. Bring a magazine to cut out pictures next class!
10/3-6	1. Collect Lab: Comparing Plant and Animal Cells 2. Q2-4 (Obj. 10-13) 3. Notes (Obj. 14-15) 4. Make a cell collage (TURN IN NEXT CLASS FOR FIVE POINTS EXTRA CREDIT!)	1. Finish CH 7 terms listed on your calendar 2. Work on Cell Collage 3. Work on the Study Guide and review for Q2-5 (Obj. 14-15)
10/7-8	1. COLLECT CELL COLLAGE FOR FIVE POINTS EXTRA CREDIT 2. Q2-5 (Obj. 14-15) 3. Notes (Obj. 16-17) 4. Lab: Diffusion in a Cell	1. Finish the Study Guide 2. Finish the Cell Collage IF NEEDED 3. Review study guide, diagrams and labs
10/10-13	1. Collect stamped terms CH 6 and 7 2. Collect Cell Collage 3. UNIT TWO ASSESSMENT (use your study guide or find a partner) 😊	1. Read CH 8 and define the terms listed on your calendar

HOMEWORK: C.P. BIOLOGY UNIT TWO

TERMS: CHAPTER 6 – DUE 9/24-25

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|------------------|--------------------------|---------------------|
| 1. atoms | 9. ion | 17. enzymes |
| 2. nucleus | 10. ionic bond | 18. substrates |
| 3. protons | 11. van der Waals forces | 19. active sites |
| 4. neutrons | 12. chemical reaction | 20. polar molecules |
| 5. electron | 13. reactants | 21. hydrogen bond |
| 6. compound | 14. products | 22. solvent |
| 7. covalent bond | 15. activation energy | 23. solutes |
| 8. molecule | 16. catalyst | 24. pH |

TERMS: CHAPTER 7 – DUE 10/7-8

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|---------------------------|---------------------------|---------------------------|
| 1. macromolecule | 15. phospholipids bilayer | 29. cytoskeleton |
| 2. polymer | 16. transport protein | 30. cilia |
| 3. carbohydrate | 17. fluid mosaic model | 31. flagella |
| 4. lipid | 18. cell wall | 32. diffusion |
| 5. protein | 19. nucleus | 33. dynamic equilibrium |
| 6. amino acid | 20. nucleolus | 34. passive transport |
| 7. peptide bond | 21. chromatin | 35. facilitated diffusion |
| 8. nucleic acid | 22. ribosome | 36. osmosis |
| 9. nucleotide | 23. endoplasmic reticulum | 37. isotonic |
| 10. cell theory | 24. golgi apparatus | 38. hypertonic |
| 11. plasma membrane | 25. vacuole | 39. hypotonic |
| 12. eukaryotic cell | 26. lysosome | 40. active transport |
| 13. prokaryotic cell | 27. chloroplast | 41. exocytosis |
| 14. selectively permeable | 28. mitochondria | 42. endocytosis |

OBJECTIVES UNIT TWO

Chapter 6 –Chemistry in Biology

1. Identify the particles that make up atoms and relate atoms to elements.
2. Define the term compound and differentiate between covalent and ionic bonds and van der Waals forces
3. Identify the parts of a chemical reaction
4. Relate energy changes to chemical reactions
5. Summarize the importance of enzymes in living organisms
6. Evaluate the structure of water and why it's a good solvent
7. describe the difference between acids and bases

Chapter 7 - Cellular Structure and Function

8. Describe the role of carbon in living systems
9. List the four important macromolecules, recognize their structure and describe their functions in living organisms
10. Identify the main ideas of the cell theory
11. Compare compound light microscopes with electron microscopes
12. Differentiate between prokaryotic and eukaryotic cells.
13. Explain the function of the cell's plasma membrane, and identify the roles of proteins, carbohydrates, and cholesterol in the plasma membrane
14. Understand the structure and function of the parts of a typical eukaryotic cell.
15. Compare and contrast the structures of plant and animal cells.
16. Describe the process of osmosis and diffusion; predict the effect of a hypotonic, hypertonic, or isotonic solution of a cell.
17. Explain the processes of passive and active transport and their importance to cells.



