Cells and Cell Structure Key Concepts 2009 **Name**_____

Cell History and Theory (pages 168-173) Due 11/5/09 (ISN pg 59) 1. List the three parts of the cell theory. 2. What are the two main differences between prokaryotic and eukaryotic cells? 3. Draw and label the three main parts of the cell? 4. Explain how the main parts of the cell are like an egg.	1. Cell theory 2. Prokaryotic 3. Eukaryotic
Nucleus and Cell Membrane (pages 174-176, 182) Due 11/6/09 (ISN pg 61) 1. Describe the function of the nucleus. 2. Why are the chromosomes considered to be the "blueprints" of the cellular activity? 3. a) Draw the cell membrane. b) Label the hydrophobic and hydrophilic parts of a phospholipid. c) Label a protein in the membrane. 4. What is the function of the cell membrane? 5. Describe the functions of two types of cell membrane proteins. 6. Where are the organelles located?	4. Nucleus 5. Chromatins 6. Chromosomes 7. Cell membrane 8. Semipermeable 9. Phospholipids 10. Hydrophilic 11. Hydrophobic 12. Cytoplasm 13. Organelles
Organelles (pages 177-181) Due 11/10/09 (ISN pg 63, 65, & 67) *Organelles that work together to make proteins or lipids.* 1. What is the function of the nucleolus? 2.What is the function of the nucleus? 3.What is the function of the ribosome? 4. Use a T-chart to show the difference between the appearance and functions of the rough ER and the smooth ER? 5. What are the jobs of the Golgi Apparatus? *Organelles that work together to breakdown.* 6. What is the primary function of the vacuole? 7. Describe the function of the lysosome. *Organelles that work together to process energy.* 8. Describe the function of the mitochondria. 9.Why do active cells have large numbers of mitochondria? 10. What is the primary function of the chloroplasts? *Organelles that work together to support and move the cell.* 11. What is the purpose of the cytoskeleton? 12. What do the flagella and cilia provide for the cell?	14. Mitochondria 15. Endoplasmic reticulum 16. Ribosomes 17. Golgi Apparatus 18. Lysosomes 19. Vacuoles 20. Chloroplasts 21. Cytoskeleton
Cell Diversity (pages 190-193, 478-481) Due 11/12/09 (ISN pg 69) 1. Explain the characteristics that can be used to distinguish plant and animal cells. 2. What characteristics of living things do viruses have? Are viruses considered to be alive? 3. Why must viruses invade host cells?	
Crossing the Membrane (pages 182-189) Due 11/19/09 (ISN pg 77) 1. What is the primary difference between passive and active transport? 2. What is the difference between diffusion and osmosis? 3. a) Draw a cell in a hypertonic solution. b) Draw a cell in a hypotonic solution. c) Draw a cell in an isotonic solution. d) For each drawing, label the concentration of the solute inside and outside the cell (High conc. Or Low conc.) e) For each draw, draw an arrow showing the flow of water. 4. Use a T-chart to distinguish between endocytosis and exocytosis.	22. Diffusion 23. Concentration gradient 24. Osmosis 25. Hypertonic solution 26. Hypotonic solution 27. Isotonic solution 28. Active transport 29. Endocytosis 30. Exocytosis

1st Common Formative Assessment on Tuesday 11/10/09
2nd Common Formative Assessment on Friday 11/20/09
Notebook is due by Friday 11/20/09