Cell Biology Notesheets by C. Kohn, Waterford WI

Name: Hour Date:

Date Assignment is due: Why late? Score: + ✓ -  
 Day of Week Date If your project was late, describe why

**Units**

1. Radish Races

2. Lab Safety

3. Carbon Cycle

4. Science Writing

5. Cell Biology

6. Cell Respiration

7. Photosynthesis

8. Research Statistics

9. Final Experimental Project

10. FFA & Science

11. Parli. Pro.

**Weekly Schedule**

1. What is a cell? What makes something a cell? List everything that is necessary:
2. How is the flame of a candle like something that is alive?
3. What is necessary for something to be alive? List everything required for life:
4. How is the flame of a candle not like something that is alive?

*Page through this notesheet. Then answer the questions below:*  
Circle one: *I need to review my notes & practice before the quiz.* Definitely – Yes – Sort of - No

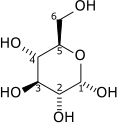
Circle one: *I have never seen or heard of some of these concepts.* Definitely – Yes – Sort of - No

Circle one: *This may be a challenging unit for me personally.* Definitely – Yes – Sort of - No

Circle one: *I may need extra strategies for some topics/vocab.* Definitely – Yes – Sort of - No

Notes C. Kohn, Agricultural Sciences - Waterford WI

**Directions**: Use the accompanying PowerPoint (<http://bit.ly/cellbiologynotes>) to complete this sheet. This is graded on a + ✓- scale.

1. What four things are necessary for something to be considered alive?  
     
   1   
     
   2   
     
   3   
     
   4
2. What is homeostasis?
3. The smallest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unit of matter is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What are the three parts of the atom? List AND describe:  
     
   Part: Description:   
     
   Part: Description:   
     
   Part: Description:
5. What would happen to the charge of an atom if it lost an electron?
6. Opposite charges are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to each other; similar charges \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each other
7. Atoms group together to form .
8. What is an example of a molecule?   
     
   Draw this molecule to the right 🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪🡪
9. When atoms form molecular bonds, they usually
10. To break apart a molecule, you
11. What is a macromolecule?
12. What is a common example of a macromolecule?
13. At the molecular level, proteins are   
    1. Proteins are like
14. Cells are
15. What are cells made of?
16. What is an organelle?
17. List AND describe 5 organelles of a cell:  
      
    Organelle: Description:   
      
    Organelle: Description:   
      
    Organelle: Description:   
      
    Organelle: Description:   
      
    Organelle: Description:
18. What is a tissue?
19. What is an organ?
20. What is a system?
21. All living things require to be .
22. Cells need energy to such as   
      
    \_
23. What do all living cell use as their primary source of energy? What is ATP?   
      
    \_
24. ATP is sort of like a How so?   
      
    \_
25. List the 2 most important differences between ATP and ADP:   
      
    \_
26. How is uncharged ADP recharged back into ATP?   
      
    \_
27. What is the “charger” that turns ADP back into ATP?
28. What goes into ATP Synthase? What comes out of ATP Synthase?
29. Where is ATP Synthase mostly found? Where is it also found?
30. ATP Synthase is like a tiny . What happens every time this   
      
    “wheel” turns?
31. What turns the ‘wheel’ of ATP Synthase?   
      
    Where does this come from? \_
32. In the image to the right, circle what powers ATP Synthase 🡪 🡪 🡪 🡪 🡪 🡪 🡪
33. After it powers the wheel, each hydrogen atom must be   
    from the mitochondria.
34. What would happen if hydrogen was not continuously removed from the mitochondria?   
      
    \_
35. What removes the used hydrogen from the mitochondria?
36. What forms and is breathed out when oxygen binds to two hydrogen atoms?
37. What would happen if we stopped consuming foods that are rich in hydrogen?   
      
    \_ Why would this happen?   
      
    \_
38. What would happen if our mitochondria did not have access to oxygen?   
      
    \_ Why would this happen?   
      
    \_   
      
    \_

Unit Wrap-up C. Kohn, Agricultural Sciences - Waterford WI

1. Write the 3 topics that you most need to review before the quiz:  
     
   1\_   
     
   2\_   
     
   3\_
2. Create 3 **high-level questions** related to this material   
   (*These questions could be something you still don’t know or questions that reflect understanding that you have now that you did not have before.*)  
     
   1\_   
     
   2\_   
     
   3\_
3. List 6 **vocabulary words** that you did not know before or have not used very often prior to this unit:  
     
   1\_ 2 3

4 5 6

1. In the spaces below, fully write three strategies that will help you to remember specific vocabulary words or topics from this unit. **NOTE**: A strategy is *not* an activity such as reviewing your notes, studying hard, etc. A strategy is a mnemonic, rhyme, analogy, or other brain-based device that is specific to one item from the unit.

1.\_   
  
2.\_   
  
3.\_

1. Circle the most appropriate response. You will only be graded on whether or not you completed this section, so be entirely honest with yourself when completing this section.

Circle one: *I used my notes outside of class to prepare for the quiz.* Definitely – Yes – Sort of - No

Circle one: *I took extra notes in the margins for very difficult concepts.* Definitely – Yes – Sort of - No

Circle one: *I created a personal strategy for at least three difficult items.* Definitely – Yes – Sort of - No

Circle one: *I was very involved and actively studying during the quiz review.* Definitely – Yes – Sort of - No

Circle one: *I think I will be satisfied with the quiz grade I received this week.* Definitely – Yes – Sort of - No