Antibiotics Notesheet by D. Peterson

Name: Hour Date:

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

# Unit Preview – complete based on your prior knowledge on this topic.

**Weekly Schedule: See Board and record**   
Mon  
  
  
  
Tues  
  
  
  
Wed  
  
  
  
  
Thurs  
  
  
  
  
Fri

1. What are the different types of pharmaceuticals?
2. What are some ways for the antibiotic’s to be effective?
3. What are some ways that pharmaceuticals have resistances?
4. What do you think the ideal pharmaceutical should contain?

*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

**Directions**: Use the accompanying PowerPoint (available online) to complete this sheet. These assignments are graded on a +/✓/- scale.

1. What are the two categories that drugs can be classified into:

1. Define “off-label usage”:
2. Define “extra-label usage”:

1. Pharmaceuticals are very specific in their and . Why?

1. What are five forms that Pharmaceuticals can come in?
2. For a pharmaceutical to work, a sufficient must be and

for a specific .

1. What are characteristics of the ideal pharmaceutical?
2. Define “antibiotics”:
3. In the case of veterinary medicine, what does “antibiotic” mean?
4. What is the difference between “narrow spectrum antibiotics” and “broad spectrum antibiotics”?

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1. How do antibiotics kill bacteria?
2. Where did antibiotics originally come from?
3. There are four mechanisms that antibiotics can use; name **and** explain each.











1. How do “sulfa-based drugs work”?

1. What are “nitrofurans” and why do we use them?

1. Steroids are commonly used to reduce the that can lead to systemic in a patient.
2. Steroids can also compromise the function of the which makes their use

and they should only be used under the of a .

1. Define “Drug Resistance”:

1. How does drug resistance develop?

1. Bacteria, like plants and animals, have DNA. However the shape is different then

plants and animals, what shape does bacterial DNA have?

1. Why is bacterial DNA more susceptible to mutations?
2. Define “Chromosomal Resistance”:
3. Define “Plasmid Resistance”:
4. How does “Transformation” occur?

1. How does “Transduction” occur?

1. What is a “bacteriophage”?
2. Conjugation is sort of like . For conjugation to occur what must a bacterial have?

1. Cells with F-plasmids are called . Cells without F-plasmids that receive are called .
2. Bacteria with this ‘extra’ F-plasmid, they can grow a , which is a   
     
   used for exchanging .
3. Explain what happens during “Conjugation”:

1. Why are “Transposons” called “jumping genes”?

1. Transposons plasmids and reproduce on their own; transposons can only

into new .

1. How can transposons be spread once they have inserted themselves?
2. There are five ways for bacterial cells to become resistance to antibiotics, name and explain each.











1. Bacterial antibiotic resistance is more a risk when one or more of six factors occur, what are the factors?
2. From the chart, what antibiotic lost its effectiveness the quickest?

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

This page is designed to help raise your grade while enabling you to develop skills you will need for after high   
school. You will need to complete every question and blank in order to receive full credit for your notes. Note: if you cannot come up with a strategy to remember a difficult concept on your own, see your instructor for help.

1. What is a topic or concept from this unit that you found to be more challenging? Write or describe below:  
     
      
     
   In the space below, create a mnemonic, rhyme, analogy, or other strategy to help you remember this particular concept:
2. What is a 2nd topic or concept from this unit that you found to be more challenging? Write or describe below:  
     
      
     
   In the space below, create a mnemonic, rhyme, analogy, or other strategy to help you remember this particular concept:
3. What is a 3rd topic or concept from this unit that you found to be more challenging? Write or describe below:  
     
      
     
   In the space below, create a mnemonic, rhyme, analogy, or other strategy to help you remember this particular concept:
4. 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

Circle one: *I might need to meet with the instructor outside of class.* Definitely – Yes – Sort of - No