Name: _____ Block: _____ Date: _____

Virtual Lab: Bacteria - What kills germs?

To complete this lab, visit http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS08/LS08.html and follow the on-screen instructions. Your teacher will provide paper copies of the information and procedure for your reference.

Problem/Purpose: What is the purpose of this Virtual Lab?

_____

_____

Background Information/Research:

1) Because bacteria multiply so rapidly, it is often necessary to _____ _____.
2) What types of products are used to control bacterial growth?

   _____
3) Different kinds of bacteria are sensitive _____ _____.

Procedure:

1) What three pathogenic bacteria will you be using for your tests?

   _____

   _____

   _____
2) What antimicrobial agents will you be testing?

   _____ _____

   _____ _____

   _____ _____
3) The colored area that covers most of the surface of the petri dish is the culture of bacteria. The tan areas are the zones of _____, where no bacteria _____.

Results: Complete the data tables below by writing in the diameter of the zone of inhibition for each bacterial strain under each condition (type of anti-microbial agent).

Control:

Bacteria Species	1- Sterile Filter Paper
Hemophilus influenzae	
Staphylococcus aureus	
Streptococcus pneumoniae	

Chemical Disinfectants:

Bacteria Species	2- Antibacterial Soap	3- Household Bleach	4- Household Disinfectant
Hemophilus influenzae			
Staphylococcus aureus			
Streptococcus pneumoniae			

Antibiotics:

Bacteria Species	5- Penicillin	6- Amoxicillin	7- Erythromycin
Hemophilus influenzae			
Staphylococcus aureus			
Streptococcus pneumoniae			

Conclusions:

1) Which chemical disinfectant is the most effective at inhibiting the growth of bacteria? Explain your answer. _____

_____

_____

_____

2) Are all antibiotics equally effective at controlling bacteria growth? Explain your answer.

_____

_____

_____

3) If you were a doctor treating a patient infected with *Staphylococcus aureus*, a bacterium that causes mild to moderate skin infections, which antibiotic would you prescribe? Why?

_____

_____

_____