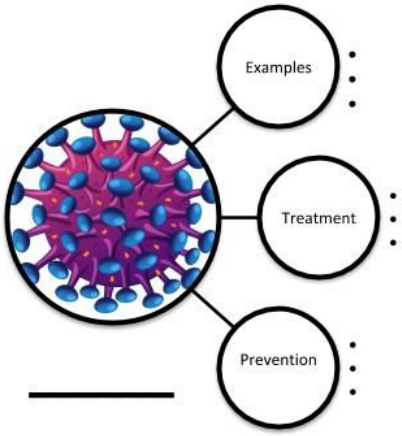
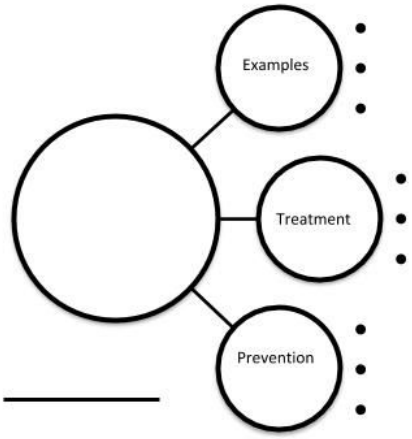
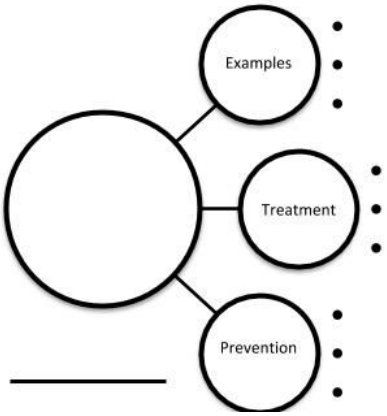
Name: _____

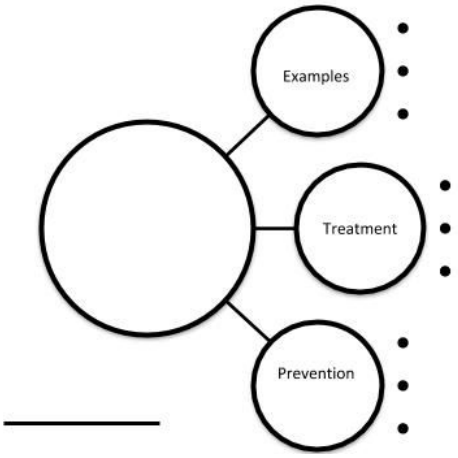
Microbiology Unit Review

1. Fill out the following diagram based on the four pathogens. Draw/include a picture for the other 3 pathogens. Include 3 examples of a disease caused by the pathogen, treatments and prevention methods for each pathogen.







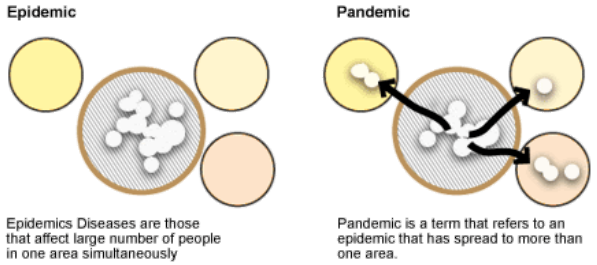


Name: _____

Microorganism: Define	**Basic Characteristics: (form, size, parts)**	**Reproduction**	**Spread How does it spread?**
Bacteria: Shapes:	Unicellular or multicellular? Living or nonliving? Size:	How does this organism reproduce?	
Fungi: Shapes:	Living or nonliving? Unicellular or multicellular or Both? Size:	How does this organism reproduce?	
Virus: Shapes:	Living or nonliving? Parts of a virus: Size:	How does this organism reproduce?	
Parasite: Shape:	Living or nonliving? Define a host :	How does this organism reproduce?	

Name: _____

Using the picture and your knowledge of epidemics and pandemics, answer the following questions:



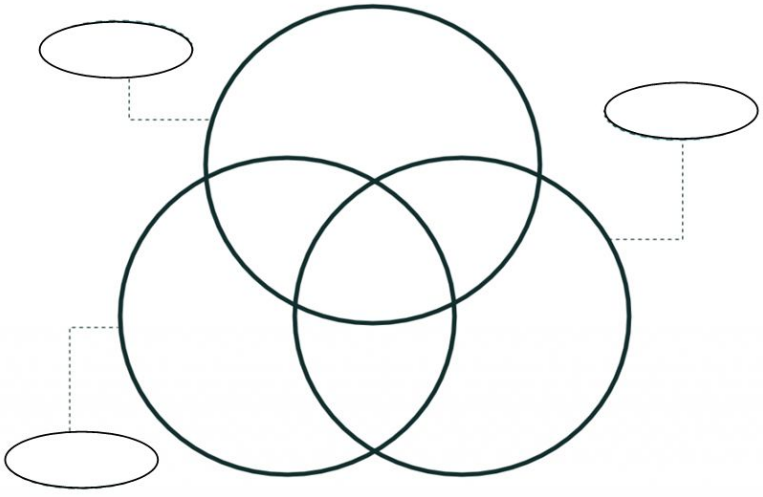
2. Describe an outbreak.

3. What is the main difference between epidemics and pandemics?

4. What's the best way to prevent a cold virus from spreading?

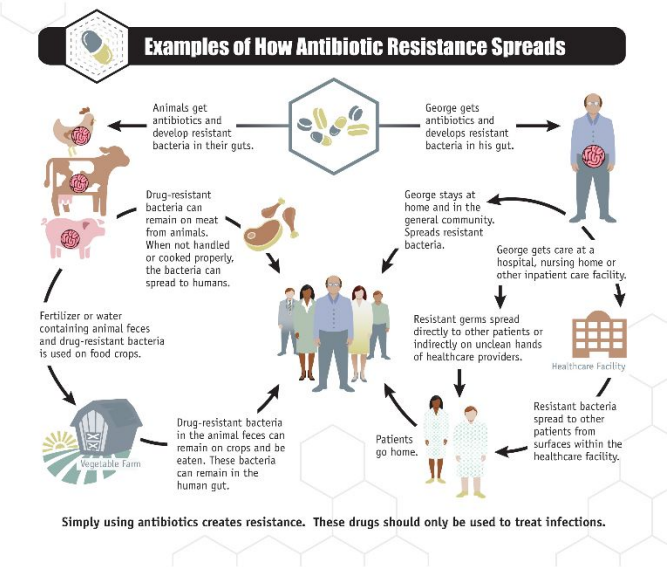
5. What enables epidemics to turn into pandemics?

6. Fill out the venn diagram below based on comparing pandemics, epidemics and outbreaks.



Name: _____

This diagram explains antibiotic resistance and how it spreads. Read the diagram to help you answer the following questions:



7. What happens when antibiotics are overused?

8. Why are less antibiotics being prescribed than in the past?

9. Using the chart below, write a 5 sentence summary about the similarities and differences between viruses and cells.

_____

_____

_____

_____

_____

Viruses and Cells

– Some of the main differences between cells and viruses are summarized in this chart.

Viruses and Cells

Characteristic	Virus	Cell
Structure	DNA or RNA in capsid, some with envelope	Cell membrane, cytoplasm; eukaryotes also contain nucleus and many organelles
Reproduction	Only within a host cell	Independent cell division, either asexually or sexually
Genetic Code	DNA or RNA	DNA
Growth and Development	No	Yes; in multicellular organisms, cells increase in number and differentiate
Obtain and Use Energy	No	Yes
Response to Environment	No	Yes
Change Over Time	Yes	Yes