**Infectious Disease**

1. **Disease**
	1. Infection
		1. Defined as:
		2. The number of micro-organisms around us is so \_\_\_\_\_ that infection is a \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
	2. Disease
		1. Defined as:
		2. \_\_\_\_\_\_\_\_\_ results in \_\_\_\_\_\_\_\_ when:
	3. Pathogen
		1. Defined as:
		2. Study of the causes of \_\_\_\_\_\_\_\_\_\_ is called \_\_\_\_\_\_\_\_\_\_\_\_
2. **Spread of disease**
	1. A few micro-organisms find the human body an \_\_\_\_\_\_\_\_\_ environment
		1. Some form a \_\_\_\_\_\_\_\_\_\_\_ relationship
		2. Some can cause \_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_
	2. Pathogens require only the \_\_\_\_\_\_\_\_\_\_ to enter the body
		1. Some enter through a \_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_
		2. Some spread through \_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_
		3. Some spread through \_\_\_\_\_\_\_\_\_\_\_ water
		4. Some spread through \_\_\_\_\_\_\_\_\_\_\_ handled by an \_\_\_\_\_\_\_\_\_\_ person
		5. Some spread by infected animals, e.g. \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_
		6. Some spread through \_\_\_\_\_\_\_\_\_\_\_ contact
3. **Viral disease**
	1. Examples:
		1.
		2.
		3.
		4.
		5.
	2. As the virus reproduces it destroys the \_\_\_\_\_\_\_\_\_ that it infects, causing the \_\_\_\_\_\_\_ of the disease
	3. Prevention
		1. Only successful protection is the \_\_\_\_\_\_\_\_\_\_ of the infection
		2. To do this, the body’s \_\_\_\_\_\_\_\_\_ system must be \_\_\_\_\_\_\_\_ to prevent infection
		3. Vaccine
			1. Defined as:
			2. Only protect if used \_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_
	4. Interferon
		1. Defined as:
		2. Function by:
4. **Bacterial disease**
	1. Louis Pasteur was the first person show that \_\_\_\_\_\_\_\_ can cause \_\_\_\_\_\_\_\_
	2. Only a \_\_\_\_\_\_ types cause disease, some examples:
		1.
		2.
		3.
		4.
		5.
		6.
		7.
	3. Bacteria can cause disease in two ways:
		1.
		2.
	4. Methods to fight bacterial disease
		1. Stimulate the \_\_\_\_\_\_\_\_ system through \_\_\_\_\_\_\_\_
		2. Antibiotics:
	5. Methods to control bacterial infection
		1. Sterilization:
			1. Heat: most bacteria can be killed in \_\_\_\_\_\_ water
			2. Disinfectant: \_\_\_\_\_\_\_\_ solution that \_\_\_\_\_\_ bacteria
		2. Food processing
			1. When bacteria “\_\_\_\_\_\_\_\_\_\_” our food, they cause it to \_\_\_\_\_\_\_\_\_\_
			2. Preventing spoilage:
				1. Refrigeration: slows the \_\_\_\_\_\_\_\_\_\_ of bacteria
				2. Sterilization by \_\_\_\_\_\_\_\_\_\_
				3. Canning: \_\_\_\_\_\_\_\_\_\_ food is sealed into \_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_ containers
				4. Chemical treatments that inhibit bacterial growth in food:

1. **Antibiotic resistance**
	1. Antibiotics function by \_\_\_\_\_\_\_\_\_\_ with processes essential for bacterial \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_
		1. Prevent building or repairing \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_
		2. Prevent making \_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_
	2. Whether the bacteria is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_ effects antibiotic \_\_\_\_\_\_\_\_\_
		1. Gram staining studies the \_\_\_\_\_\_\_\_\_\_\_\_\_ nature of the bacterial cell wall
		2. Gram-positive bacteria are coloured \_\_\_\_\_\_\_\_\_\_ because they take up the stain \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
			1. Their cell walls are made of:
		3. Gram-Negative bacteria are coloured \_\_\_\_\_\_\_\_\_\_ because they take up the stain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
			1. There cell walls are made of:
	3. Antibiotic resistance arises from \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ lowering the antibiotics \_\_\_\_\_\_\_\_\_\_\_ by:
		1. Reducing drugs ability to \_\_\_\_\_\_\_\_\_\_ the cell
		2. Changing the \_\_\_\_\_\_\_\_\_ site of the \_\_\_\_\_\_\_\_ within the cell
	4. The spread of resistance is accelerated by \_\_\_\_\_\_\_\_\_\_ gene transfer through \_\_\_\_\_\_\_\_\_\_\_
	5. Why should you always finish your antibiotics?
2. **Bacteriaphage**
	1. Bacteriophage:
		1. Definition:
		2. Sketch:

**<https://www.youtube.com/watch?v=d-v8uSG2ewk>**