

# Bacteria & Virus Notes

Domain \_\_\_\_\_

**Kingdom** \_\_\_\_\_: found in extreme habitats

Examples: \_\_\_\_\_

Domain \_\_\_\_\_

**Kingdom** \_\_\_\_\_: found everywhere

Examples: \_\_\_\_\_

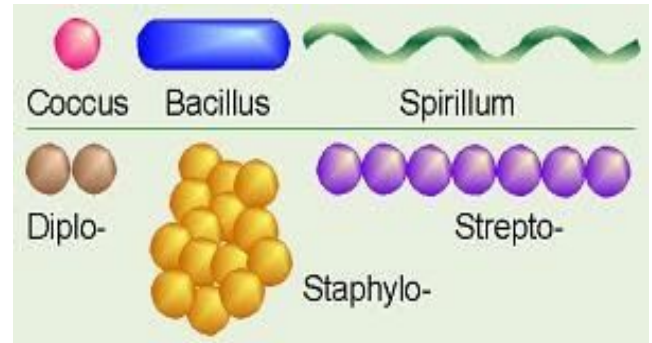
Most bacteria **require** \_\_\_\_\_ for respiration – thus called \_\_\_\_\_

Others will be **killed** in the presence of oxygen and are called \_\_\_\_\_

**Bacteria are classified in 2 major ways:** \_\_\_\_\_ and \_\_\_\_\_

## 3 types of shapes:

1. \_\_\_\_\_: round shaped
2. \_\_\_\_\_: spiral shaped
3. \_\_\_\_\_: rod shaped



## 3 types of arrangement

1. \_\_\_\_\_: paired
2. \_\_\_\_\_: clustered together
3. \_\_\_\_\_: long chain

Osmosis is important in treatment of bacterial diseases – because they have a \_\_\_\_\_ that is very strong to prevent rupture. Penicillin kills \_\_\_\_\_ by interfering with the cell wall – it is like \_\_\_\_\_ in the wall

## 2 types of cell walls

- 1) \_\_\_\_\_: turns purple and has a layered cell wall Example: *Streptococcus pneumoniae*
- 2) \_\_\_\_\_: turns pink and has a thick cell wall Example: *E. coli*

Reproduction is \_\_\_\_\_

1. Binary Fission
2. Conjugation

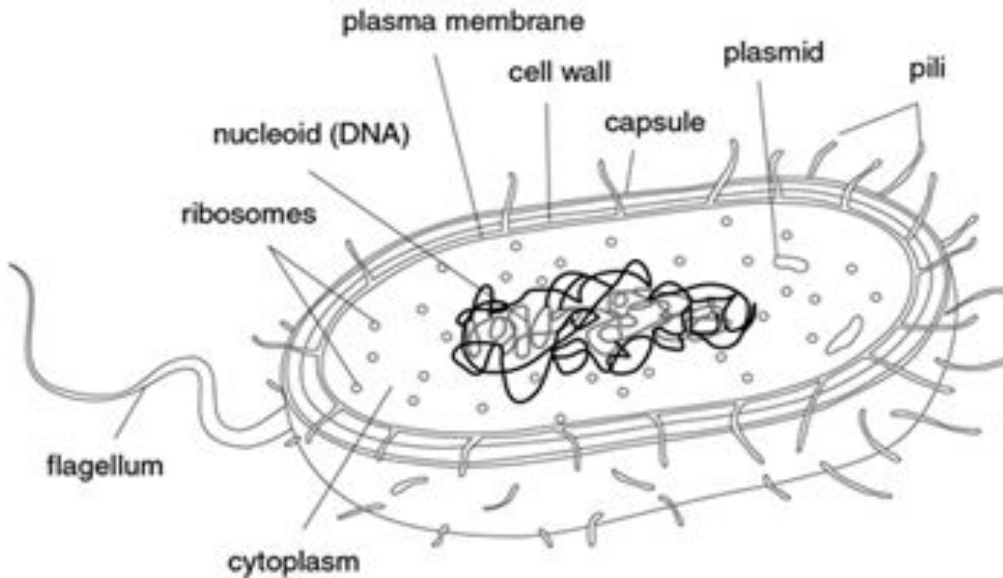
# Virus Notes

- A \_\_\_\_\_ is a disease causing \_\_\_\_\_ particle that can reproduce only in \_\_\_\_\_ cells.
- A virus is considered not-living because it cannot \_\_\_\_\_, \_\_\_\_\_ or \_\_\_\_\_ and they cannot \_\_\_\_\_ on their own
- The living cell that a virus reproduces inside of is called a \_\_\_\_\_
- Before a virus can enter and reproduce in a cell, it must recognize and attach to a specific site ... therefore most viruses can only \_\_\_\_\_ in a few cells
- Once inside a host cell a virus takes over that \_\_\_\_\_
- A protein coat that holds the genetic material is called the \_\_\_\_\_
- \_\_\_\_\_: a membrane that surrounds the capsid for added protection
- **Genetic material:** can be either \_\_\_\_\_ or \_\_\_\_\_  
RNA: HIV, AIDS, influenza, rabies  
DNA: warts, chicken pox, and mono

## Bacteria -vs- Virus

Virus	Bacteria
1) _____ alive	1) _____ alive
2) Cannot function until _____ a host	2) Contains _____ such as cytoplasm, cell wall, and ribosomes
3) Genetic material is _____	3) Genetic material is _____
4) Does not go thru _____	4) Does go thru _____
5) No _____ thus no _____	5) Has _____ thus it can go thru _____
	6) Mobile on own using _____

### Prokaryotic cell



Virus Diagram

