|  |  |
| --- | --- |
| CORNELL NOTES  MAIN IDEAS\  QUESTIONS | UNIT E, CHAPTER 5  Characteristics of Bacteria, Viruses, Fungi, and Parasites  NOTES: |
| Microbiology | The branch of biology that studies microorganisms and their effects on other living organisms. |
| Microbe | A microscopic living organism (bacterium, fungus, protozoan; microorganism). |
| Unicellular | Pertaining to an organism whose functions are all carried out within one [cell](http://www.biology-online.org/dictionary/Cell). |
| Multicellular | Having or consisting of many [cells](http://www.biology-online.org/dictionary/Cell) or more than one [cell](http://www.biology-online.org/dictionary/Cell) to perform all vital functions. |
| Prokaryotic | An [organism](http://www.biology-online.org/dictionary/Organism) whose [cell](http://www.biology-online.org/dictionary/Cell) generally lacks a true [nucleus](http://www.biology-online.org/dictionary/Nucleus) and its genetic material is contained within the cytoplasm. |
| Eukaryotic | Any [organism](http://en.wikipedia.org/wiki/Organism) whose [cells](http://en.wikipedia.org/wiki/Cell_(biology)) contain a [nucleus](http://en.wikipedia.org/wiki/Cell_nucleus) and other structures ([organelles](http://en.wikipedia.org/wiki/Organelles)) enclosed within [membranes](http://en.wikipedia.org/wiki/Biological_membrane). |
| Bacteria | Bacteria lack a membrane-bound [nucleus](http://www.britannica.com/EBchecked/topic/422009/nucleus) and other internal structures and are therefore ranked among the unicellular life forms called [prokaryotes](http://www.britannica.com/EBchecked/topic/478531/prokaryote). |
| Protozoa | A diverse group of mostly [motile](http://en.wikipedia.org/wiki/Motile) [unicellular](http://en.wikipedia.org/wiki/Unicellular_organism) [eukaryotic](http://en.wikipedia.org/wiki/Eukaryotic) organisms. |
| Fungi | Any member of a large group of [eukaryotic](http://en.wikipedia.org/wiki/Eukaryote) organisms that includes microorganisms such as [yeasts](http://en.wikipedia.org/wiki/Yeast) and [molds](http://en.wikipedia.org/wiki/Mold) as well as the more familiar [mushrooms](http://en.wikipedia.org/wiki/Mushrooms). |
| Algae | A very large and diverse group of [eukaryotic](http://en.wikipedia.org/wiki/Eukaryotic) organisms, ranging from [unicellular](http://en.wikipedia.org/wiki/Unicellular) [diatoms](http://en.wikipedia.org/wiki/Diatoms) to [multi-cellular](http://en.wikipedia.org/wiki/Multicellular) forms such as the [giant kelp](http://en.wikipedia.org/wiki/Macrocystis_pyrifera). |
| Viruses | A small, non-living, [infectious agent](http://en.wikipedia.org/wiki/Pathogen) that replicates only inside the living [cells](http://en.wikipedia.org/wiki/Cell_(biology)) of other organisms. Viruses can infect all types of life forms, from [animals](http://en.wikipedia.org/wiki/Animal) and [plants](http://en.wikipedia.org/wiki/Plant) to [bacteria](http://en.wikipedia.org/wiki/Bacteria). |
| Pathogens | Anything that can cause disease. |
| Infection | The invasion and multiplication of microorganisms in body tissues. |
| Contamination | The presence of extraneous, especially infectious, material that renders a substance or preparation impure or harmful. |
| Host Cell | A [cell](http://www.biology-online.org/dictionary/Cell) that harbors [foreign](http://www.biology-online.org/dictionary/Foreign) molecules, [viruses](http://www.biology-online.org/dictionary/Virus), or [microorganisms](http://www.biology-online.org/dictionary/Microorganism). For example, a [cell](http://www.biology-online.org/dictionary/Cell) being [host](http://www.biology-online.org/dictionary/Host) to a [virus](http://www.biology-online.org/dictionary/Virus). |
| Vectors | A [biotic](http://www.biology-online.org/dictionary/Biotic) [agent](http://www.biology-online.org/dictionary/Agent) that disperses [reproductive](http://www.biology-online.org/dictionary/Reproductive) [structures](http://www.biology-online.org/dictionary/Structures) of another [organism](http://www.biology-online.org/dictionary/Organism), *as a* [*bee*](http://www.biology-online.org/dictionary/Bee) *transmitting* [*pollen*](http://www.biology-online.org/dictionary/Pollen) *to the* [*stigma*](http://www.biology-online.org/dictionary/Stigma) *of a* [*flower*](http://www.biology-online.org/dictionary/Flower). |
| Epidemic | The rapid spread of [infectious disease](http://en.wikipedia.org/wiki/Infectious_disease) to a large number of persons in a given population within a short period of time, usually two weeks or less. |
| Pandemic | An [epidemic](http://en.wikipedia.org/wiki/Epidemic) of [infectious disease](http://en.wikipedia.org/wiki/Infectious_disease) that has spread through human populations across a large region; for instance multiple [continents](http://en.wikipedia.org/wiki/Continents), or even worldwide. |
| Vaccine | A weakened or dead form of pathogen. |
| **SUMMARY** | |