

For CH 19 you need to know the terms listed below. There is no quiz over these term. You are still responsible for terms that were previously presented.

19-1

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| bacillus | Rod shaped. Applies to bacteria and other prokaryotes. |
| coccus | Spherical shaped. Applies to bacteria and other prokaryotes. |
| spirillum | Corkscrew, curved, or twisted in shape. Applies to bacteria and other prokaryotes. |
| binary fission | Asexual bacterial replication; involves division of the cytoplasm and distribution of one circular chromosome to each new cell. |
| endospore | The term used to describe small amounts of cytoplasm surrounding a compact DNA all surrounded by a thick cell wall. An endospore is formed when conditions are unfavorable for growth. |
| nitrogen fixation | The process by which bacteria fix nitrogen from the air. |

19-2

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| virus | A non-living particle made up of a nucleic acid surrounded by a protein coat. |
| capsid | The protein coat covering viral nucleic acid. |
| lytic infection | A fast paced viral infection in which the viral DNA immediately becomes active and directs the host DNA to make new viral DNA and capsids. |
| lysogenic infection | A viral infection in which the viral DNA lies dormant for some period of time. Under the right conditions the viral DNA become active and exhibits a lytic phase. |
| prophage | A virus that infects bacteria. |
| retrovirus | A virus that contains RNA and uses it to make DNA once inside the host cell. AIDS is a retrovirus. |

19-3

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| pathogen | A disease causing bacteria or virus. |
| vaccine | A weakened or killed bacteria or virus injected into a person to produce immunity to that pathogen. |
| antibiotic | A medication given to kill bacteria. |
| viroid | A single stranded RNA molecule without a capsid. Can cause diseases in plants. |
| prions | Protein particles that cause infections. Some can cause diseases in animals and man. |

20-1

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| protist | Eukaryotic organisms that do not belong to the kingdom Plantae, Animalia, or Fungi. |
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20-2

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| pseudopod | "False foot", a cytoplasmic extension used for movement and feeding. |
| amoeboid movement | The movement that results from the formation of pseudopods and cytoplasmic streaming. |
| food vacuole | Formed as the result of pseudopods surrounding a food particle. |
| cilium | A hair like projection formed from proteins; used for feeding and movement. |
| trichocyst | A bottle like structure in <i>Paramecium</i> that will release a barb/needlelike projection as a defense mechanism. |
| macronucleus | The large nucleus in <i>Paramecium</i> that contains multiple copies of the organisms genetic information. |
| micronucleus | The smaller nucleus that contain a backup copy of the <i>Paramecium's</i> genetic information. |
| gullet | "Throat"; the indentation into which cilia sweep food particles. |
| anal pore | The area of the cell membrane through waste materials exit. |
| contractile vacuole | A vacuole which collects, then expels the excess water that entered the organism through diffusion. |
| conjugation | An process in which genetic information is exchanged between two <i>Paramecium</i> . Is not reproduction as no new organisms are formed. |

20-3

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|-------------------|---|
| accessory pigment | Any pigment that captures light energy at different wavelength than chlorophyll, and then transfers it to chlorophyll. |
| eyespot | A photosensitive area in the Euglenophytes; contains a reddish pigment. |
| pellicle | A highly folded cell membrane that provides protection. |
| phytoplankton | Small algae found near the surface of the ocean. Form the base of many food chains. Are responsible for almost half of the photosynthetic activity that occurs. |

For CH 21 you need to know the terms listed below.

21-1

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| chitin | A complex carbohydrate found in the cell walls of fungi and exoskeletons of insects. |
| hypha | The filaments multicellular of fungi. |
| mycelium | A mass of fungi hypha. |

20-3

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|-------------|--|
| saprobe | A organism that obtains food from decaying organic matter. A type of decomposer. |
| lichen | A symbiotic relationship between a photosynthetic organism (algae) and a fungus. |
| mycorrhizae | A symbiotic relationship between the roots of a plant and a fungus. |