

Microbiology Review

Microbiology

- 1) Define microbiology.
- 2) What is the difference between inoculation and incubation?
- 3) What is the difference between prokaryotes and eukaryotes?

Taxonomy

- 1) Define taxonomy.
- 2) What is meant by binomial nomenclature? Provide one animal listed in binomial nomenclature.
- 3) Name the taxonomic categories IN ORDER (King Philip Came Over For Great Soup).
- 4) What are the three domains?
- 5) Be prepared to use a dichotomous key to classify microbes.

Archae and Bacteria

- 1) What two kingdoms can bacteria be classified into?
- 2) Are bacteria prokaryotic or eukaryotic?
- 3) What is the most studied eubacteria?
- 4) What are four ways in which eubacteria could be classified?
- 5) What is the difference between archae bacteria and eubacteria?
- 6) Name and describe one way we can classify eubacteria?

Asexual Reproduction

- 1) NAME and DESCRIBE the two types of asexual reproduction. How are they different?

Protista

- 1) Are Protista eukaryotes or prokaryotes?
- 2) What are the three types of Protista?
- 3) Describe in detail plant-like, animal-like, and fungus-like protozoa.
- 4) Name four categories of animal-like protozoa.

Viruses

- 1) What are viruses not considered to be living?
- 2) What is a capsid?
- 3) What are the proteins on the outside of a virus used for?
- 4) What two ways can viruses be classified?
- 5) Outline the six steps of a virus entering a host cell.

Immune System

- 1) Define pathogen.
- 2) Name two organs in the immune system and what they do.
- 3) Outline the three lines of defense. Briefly describe what happens at each line.
- 4) Define the term antigen and antibody.
- 5) What is the difference between passive and active immunity?

Fungus

- 1) Define a fungus.
- 2) Name one similarity between plants and fungi.
- 3) Name three differences between plants and fungi.
- 4) What are the two main types of fungi?
- 5) What is the difference between hyphae and mycelium?
- 6) What is an opportunistic pathogen?
- 7) What drugs do we use to treat a fungal infection?

Defense Against Disease

- 1) Define epidemiologist, virologist, virulent, and epidemic.
- 2) Outline the five lines of defenses against disease in the body. Be able to provide an example for each.
- 3) What are vaccines and how do they work?
- 4) What are the four types of preventative measures used to control epidemics.