**Cells and Microorganisms Study Guide**

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| Complete the table by defining each term. Organelle  | Each cell contains structures that perform certain functions to keep the cell alive  |
| Cell  | The basic unit of structure and function in all living things  |
| Microorganism  | An organism that is too small to be seen with the unaided eye  |
| Cell Wall  | A rigid organelle that provides structure and protects to plant cells  |
| Mitochondria  | An organelle that provides energy to the cell  |
| Nucleus  | An organelle that directs the cell’s activities and holds genetic information. |
| Cytoplasm  | The jelly-like organelle that keeps the cell healthy  |
| Cell Membrane  | An organelle that controls what goes in and out of the cell  |
| Chloroplast  | An organelle that makes food for a plant cell  |
| Vacuole  | An organelle that stores food, water, and waste  |

2. What are two structures that are found in a plant cell and not an animal cell, and what do they do?

a. cell wall - it supports and protects a plant cell

b. chloroplasts – convert sunlight to food

3. Give three examples of harmful microorganisms.

Possible answers include: red tide algae, athlete’s foot, ringworm fungus, salmonella, E. coli, and strep bacteria

4. What type of instrument would you use to look at cells? \_\_microscope\_\_

5. Give three examlpes of helpful microorganisms.

Possible answers include: mold for penicillin, yeast for bread, bacteria turning milk into yogurt, lactobacillus, probiotics, and phytoplankton

6. What shape are plant cells? \_\_\_ rectangular \_\_\_\_\_

7. What shape are animal cells? \_\_\_\_round\_\_\_\_\_\_\_

8. Mold is a type of what? \_\_\_\_ Fungus \_\_\_\_\_\_\_\_\_\_\_\_

9. What are four types of microorganisms?

Possible answers include: bacteria, fungus, viruses, algae, or amoeba