Science Unit 2 Study Guide

Part 1: Vocabulary

Complete the following chart on vocabulary about cells and microorganisms

|  |  |  |
| --- | --- | --- |
| Vocabulary Term | Definition/Function | Illustration/Analogy |
| Cell |  |  |
| Cell membrane |  |  |
| Cell Wall |  |  |
| Cytoplasm |  |  |
| Nucleus |  |  |
| Chloroplast |  |  |
| Microorganism |  |  |
| Beneficial |  |  |
| Harmful |  |  |

Part 2: Matching

Match the following organelles to the analogy that best shows its function.

|  |  |  |
| --- | --- | --- |
| 1. Cell membrane
 |  | * A lunchbox that stores water and food and used napkins
 |
| 1. Cell wall
 |  | * The jello that holds fruits in place
 |
| 1. Cytoplasm
 |  | * The boss of a business, the person in charge
 |
| 1. Vacuole
 |  | * The bricks in a house that keep it sturdy
 |
| 1. Nucleus
 |  | * A chef, making delicious food
 |
| 1. Chloroplast
 |  | * A bodyguard that decides who goes in an out of a building
 |

Part 3: Multiple Choice

Part A: Sort the following information from the chart below into two categories: Microorganisms that are beneficial, and Microorganisms that are harmful. Be sure to use all the microorganisms in the chart.

|  |  |
| --- | --- |
| Beneficial Microorganisms | Harmful Microorganisms |
|  |  |



Part B: Choose two microorganisms from the previous chart. Explain in complete sentences how these microorganisms are either helpful or harmful, using details from the chart as evidence. Be sure to write your response by **restating, answering, and proving.**

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Part 4: Creating a Model

In the space provided below, draw and label a model of a plant cell and an animal cell. Be sure to draw and label all of the following organelles:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cell Wall | Cell Membrane | Cytoplasm | Nucleus | Chloroplast |
| Animal Cell | Plant Cell |