1.1 Reading Study Guide B

BIG IDEA All living things are made up of cells.

KEY CONCEPT The cell is the basic unit of living things.

Review

A theory is something that explains what is observed in nature.

Take Notes

- I. Living things are different from nonliving things. (p. 9)
 - 1. Fill in the four-square diagram for organism.

| Definition: | | Characteristics: |
|-------------|-----------|------------------|
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| | | |
| Examples: | ORGANISM) | Nonexamples: |
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A. Characteristics of Life and Needs of Life (p. 10)

2. Fill in the main idea web for the main idea shown.

| Its body must be orga its needs. | anized to meet | | |
|-------------------------------------|--------------------|-------------------|------|
| Ever | y living thing has | four characterist | ics. |
| | | | |

3. What are the three things every organism needs in order to live?

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II. All living things are made of cells. (p. 11)

4. In the table below, write a definition and one example for each word.

| | Definition | Example |
|---------------|------------|---------|
| Unicellular | | |
| Multicellular | | |

III. The microscope led to the discovery of cells. (p. 12)

5. Why did people not know about cells before the invention of the microscope?

IV. Cells come from other cells. (p. 13)

6. Fill in the main idea web for the main idea shown.

| "The cell theory" is one of the basic concepts of biology. |
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V. The cell theory is important to the study of biology. (p. 14)

A. Louis Pasteur and Bacteria and Spontaneous Generation (p. 14)

| 7. | A modern scientist is trying to repeat Pasteur's experiment. In step one, she boils a |
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| | nutrient broth. In step two, she seals the broth and lets it sit for one week. For step |
| | three, explain what the broth will look like after the week has passed, and why. |

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THE CELL IS THE BASIC UNIT OF LIVING THINGS.

1 Reinforcing Key Concepts

BIG IDEA All living things are made up of cells.

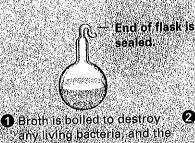
KEY CONCEPT The cell is the basic unit of living things.

1. Living things are different from nonliving things. All living things have certain characteristics. Write one characteristic and two examples in the table below.

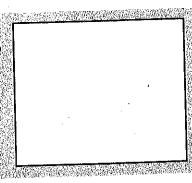
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- 2. All living things are made of cells. Some living things are just a single cell, while others are made up of many cells. How can an organism that is only one cell be considered a living thing?
- 3. The microscope led to the discovery of cells. Most cells are too small to see without the aid of a microscope. Who is credited with the discovery of cells? Why were they named cells?
- 4. Cells come from other cells. Complete the three points of the cell theory below.
 - 1. All living things are made of one or more cells. 2. _____
- 5. The cell theory is important to the study of biology. Draw the last step of Louis

Pasteur's experiment. Explain your drawing and why it helps to prove the cell theory.



Exposure to air is the variable. 2 The end of the flask is broken to expose the broth to the air. The broth is clear.



Alike But Different

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