Name _____ Date _____ Period _____

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Cell Theory

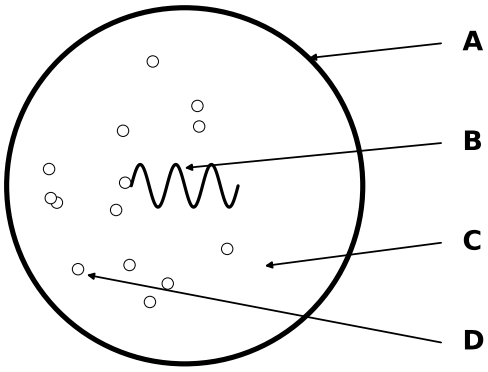
Biology

Answer in complete sentences. Use the table and drawing as evidence.

1. Cell theory has three parts: (1) all living things are made of one or more cells; (2) the cell is the basic unit of structure and function; (3) new cells come from existing cells. Match each observation to the part it supports.

Observation	**Part of cell theory (1, 2, or 3)**
(a) A scientist finds that a tree is made of millions of cells.	
(b) A scientist watches one bacterium divide into two bacteria.	
(c) A single amoeba cell takes in food, moves, and removes wastes on its own.	

2. The drawing shows a cell. Name the structure at each letter.



A _____ B _____ C _____ D _____

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3. Pasteur-style test: three flasks hold the same boiled broth.

Flask	Setup	Result
A	Boiled broth, straight neck, open to air	Cloudy after 2 days
B	Boiled broth, curved neck, open to air	Clear after 30 days
C	Same as B, then tilted so broth touched the curve	Cloudy after 2 days

(a) Why did Flask B stay clear while Flask A turned cloudy?

(b) Write a claim, evidence, and reasoning to answer: did the microbes come from the broth itself or from existing microbes in the air?

4. Give one example of a unicellular organism. Explain how a single cell can be a whole organism.

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