

VIDEO SCRIPT:

This morning, I want to introduce the idea of the cell theory. Cells were first observed in the 1600's. A British scientist, Robert Hooke, used a primitive microscope to look at a piece of cork and saw what looked like little boxes—what he called “cells.” But Hooke thought cells were only present in plants. A Dutch scientist, Anton Leuwenhoek—he actually invented the microscope—looked at pond water, and discovered one-celled creatures, which he called “animalcules.” He also observed the blood cells of animals.

There wasn't much progress for the next 150 years. Then in 1838, a German scientist, Matthias Schleiden, concluded that all plant parts are made up of cells. A year later, his friend Theodor Schwann found that all animal tissues are also made up of cells. A German doctor, Rudolf Virchow, learned that cells only came from cell division.

So, as a result of these discoveries, the three components of the classical cell theory were in place—not the modern one, because now we know about DNA and so on—but the classic one. First, all organisms consist of one cell or more. Next, the cell is the basic unit of all living things. And finally, all cells come from pre-existing cells.

PART 1: Video**A. Watch the student presentation and answer questions 1–10.**Questions 1–4

Choose the best answer. (1 point each)

1. What is the main idea of this lecture?
 - A. The classic cell theory differs from the modern cell theory in several important ways.
 - B. Anton Leuwenhoek developed the microscope in order to study cells.
 - C.** A number of important discoveries led to the development of the classic cell theory.

2. What mistake did Robert Hook make?
 - A. He believed cells could be found only in cork.
 - B. He thought cells looked like little boxes.
 - C.** He believed that only plants were made up of cells.

3. What did Anton Leuwenhoek mean by the term “animalcules?”
 - A. This is what he called blood cells in animals.
 - B. This is how he referred to plant cells.
 - C.** This is his name for one-celled creatures.

4. What was the relationship between German scientists Matthias Schleiden and Theodor Schwan?

- A.** They were friends.
- B. Schleiden was Schwan's teacher
- C. Schwan was Schleiden's doctor

Questions 5–9

Match the scientist and the correct discovery. (1 point each)

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|--------------------------------|---|
| B 5. Robert Hook | A. He learned that all animal tissues are made up of cells. |
| C 6. Anton Leuwenhoek | B. He was the first to observe cells. |
| E 7. Matthias Schleiden | C. He discovered one-cell creatures and blood cells. |
| A 8. Theodor Schwan | D. He learned that all cells reproduce by cell-division. |
| D 9. Rudolf Virchow | E. He concluded that all plant parts are made up of cells. |

B. Read the questions first. Then watch the presentation again. Answer questions 10–14.

Question 10

Choose the best answer. (1 point each)

10. Which expression does the speaker use to show cause and effect?

- A.** "As a result of these discoveries, . . ."
- B. "Because of these discoveries, . . ."
- C. "These discoveries led to . . ."

Questions 11–15

Read the statements. Choose YES if they are components of the classic cell theory. Choose NO if they are NOT components of classic cell theory. (1 point each)

	Yes	No
11. Every organism is made up of one or more cells.	X	
12. All cells contain DNA.		X
13. All cells are the result of cell division.	X	
14. The cell is the basic unit of life.	X	
15. There are major differences between plant cells and animal cells.		X

Part 2

Questions 16–22

Mark expressions that signal a cause with a C. Mark expressions that signal an effect with an E. Two expressions are not used. (7 points)

_____ However, not everyone believes that herbal medicines are effective.

C Why are pharmaceutical drugs so expensive? Well, . . .

E . . . often leads to physical and psychological stress.

_____ Although some herbs are safe when they are used alone, . . .

E This has led the governments of some countries to regulate the preparation of herbal remedies.

C The recent popularity of herbal medicines is due to . . .

E As a result, there is much less formal research done on herbal drugs than on pharmaceutical drugs.

Questions 23–24

Read the excerpt from a lecture. Then choose the best notes.

23. “An automaton is a mechanical device such as a robot that operates under its own power. Consequently, people that act or respond mechanically are sometimes called automatons.”

A. Automaton = mech device e.g. robot operates own power → people act/respond mechanically sometimes called automatons

B. Automaton: mech device (robot) operates own power ← “automaton” used for people act/respond mechanically

24. “It’s not surprising that Leonardo da Vinci designed automatons, because many of his ideas were 100 of years ahead of their time.”

A. Not surprising Leo. da Vinci designed automatons → many ideas 100 yrs ahead their time.

B. da Vinci designed automatons: not surprising ← his ideas 100 yrs ahead time

Questions 25

Read the excerpts from a presentation. The underlined words are stressed by the speaker. Choose the excerpt that shows proper stress.

25.

A. “The abacus, a calculating device made of string and beads, has been used for thousands of years.”

B. “The abacus, a calculating device made of string and beads, has been used for thousands of years.”