

The Cell Theory

I. The Three Parts of The Cell Theory

Directions: Read the information below and identify each part of the cell theory.

1. A cow is made of many cells. The cells are arranged in such a way as to produce a definite shape and size.

2. Different cells have different functions: a bone cell provides support, a blood cell provides transport, a muscle cell provides movement, a skin cell provides surface protection, and a nerve cell carries impulses or messages.

3. Once a cell dies it cannot reproduce. Living cells can only originate from other living cells. When you cut your finger the neighboring cells reproduce new skin cells.

II. Define

a. Theory:

b. The Cell Theory:

Historical Contributions to The Cell Theory

I. Discoveries

a. With the aid of the website handout, list the biologist's name(s), date, and contributions in the table below.

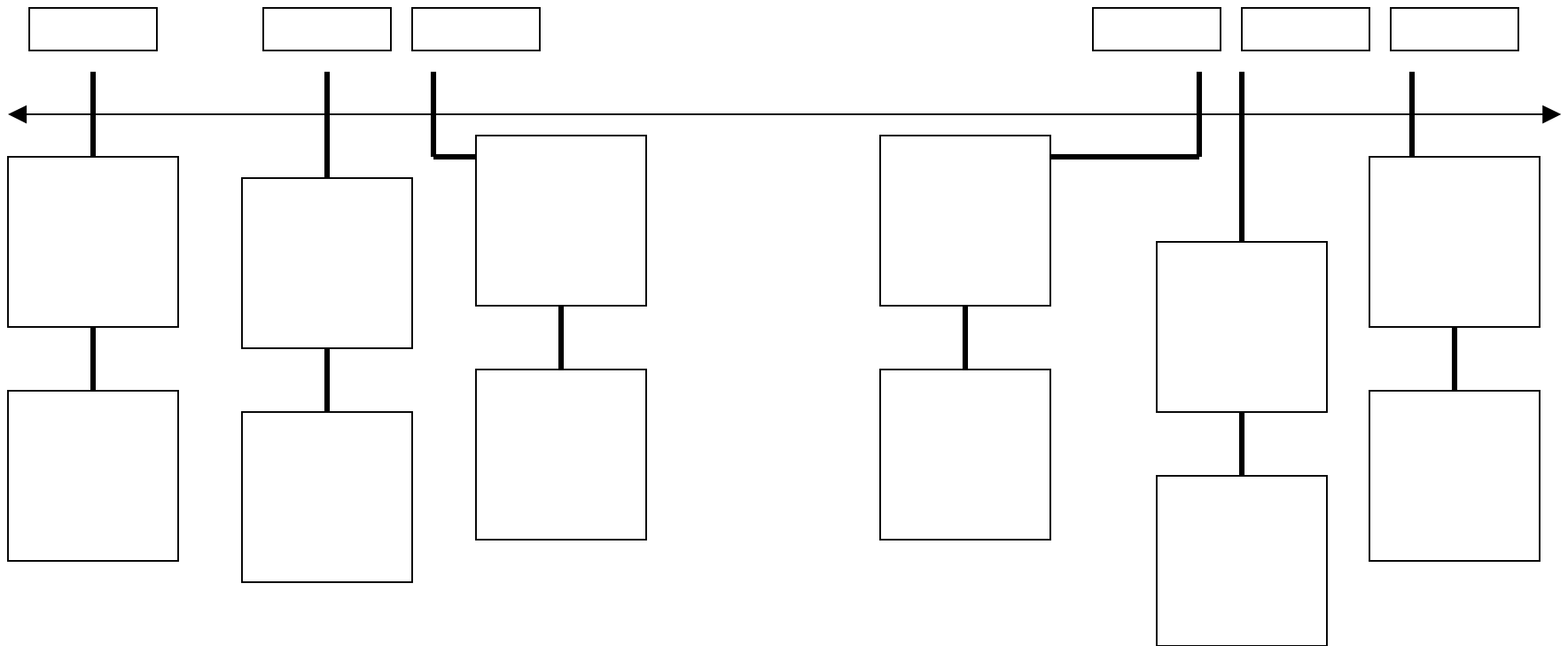
<u>Biologist</u>	<u>Date</u>	<u>Contributions</u>

Cell Theory Historical Timeline

II. Timeline

a. Draw a timeline showing the chronological order of these scientists and their contributions.

- Label the timeline with dates of the above scientists' discoveries.
- The earliest date should be on the left of the timeline and the most recent date on the right.
- Label each date with the corresponding scientist's name and contribution(s) in an organized and legible manner.
- Be sure your spacing shows a reasonable approximation of the amount of time elapsed between dates.



III. Historical Contribution Questions

Directions: Answer all of the following questions in complete sentences.

1. What theory did these scientists provide evidence for?
2. What instrument was necessary before the cell theory could be developed?
3. Which three scientists directly contributed evidence for the cell theory?
4. How did the earlier scientists and their contributions directly affect the discoveries of later scientists? For example, what had to come first?
5. List the three parts of the cell theory.

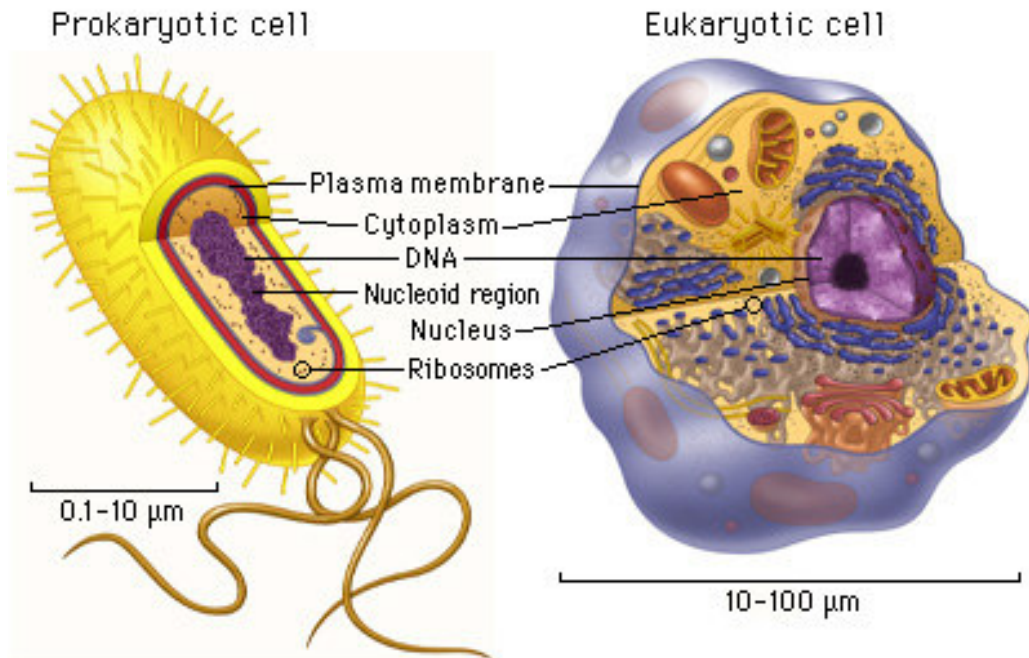
Historical Development

Directions: Read the statement below and answer the questions.

1. The acquisition of knowledge about the cell occurred in a brief span of time and involved only one or two biologists. Do you agree or disagree? Explain.

I. Two Major Classifications of Cells

Directions: Study the diagrams of the two different cells and complete the chart below.



<u>Criteria</u>	<u>Prokaryotic Cell</u>	<u>Eukaryotic Cell</u>
Similarities		
Differences		
Examples		

2. Based on the above table define the following:

a. Prokaryotic Cell:

b. Eukaryotic Cell:

