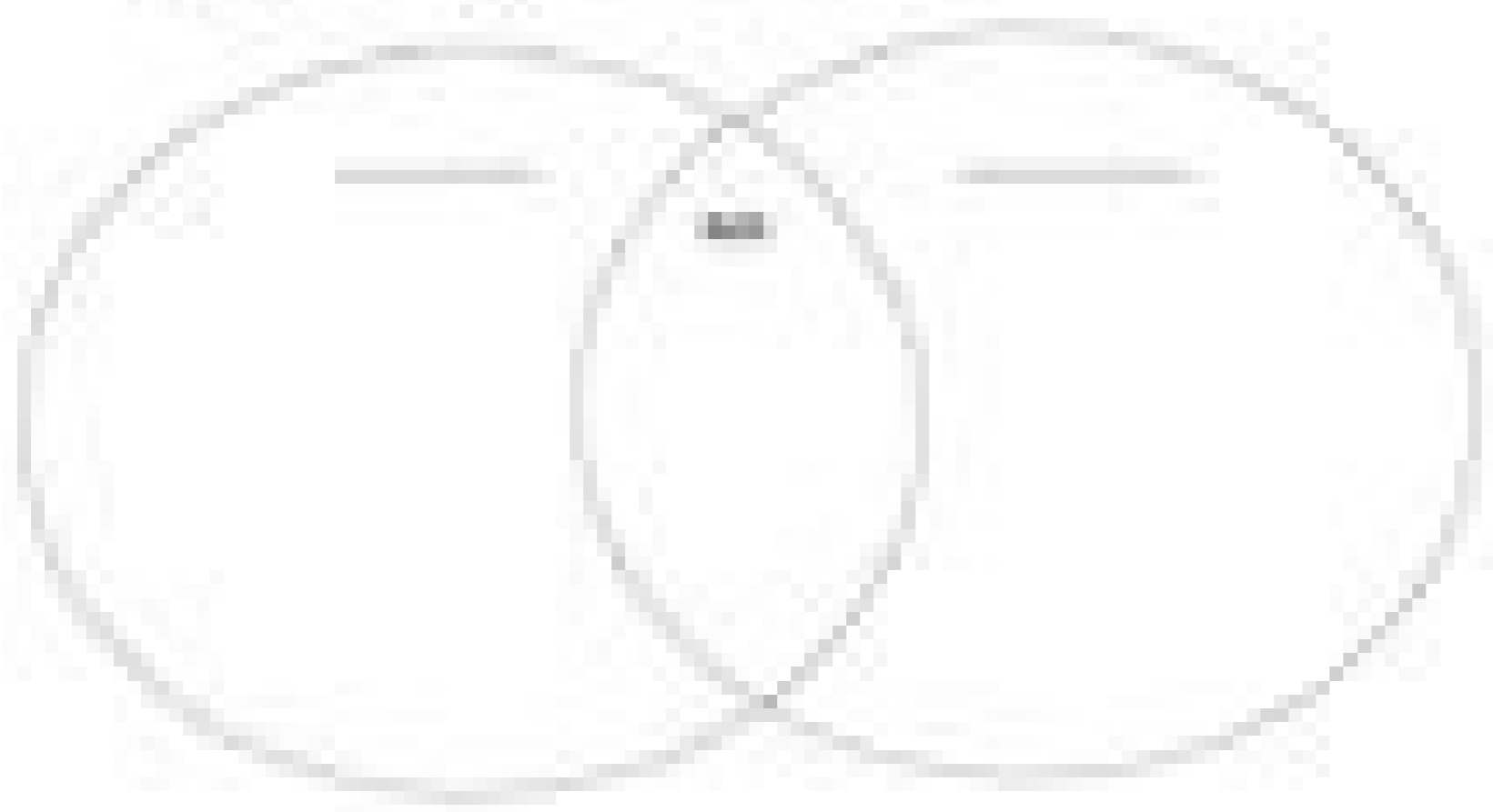


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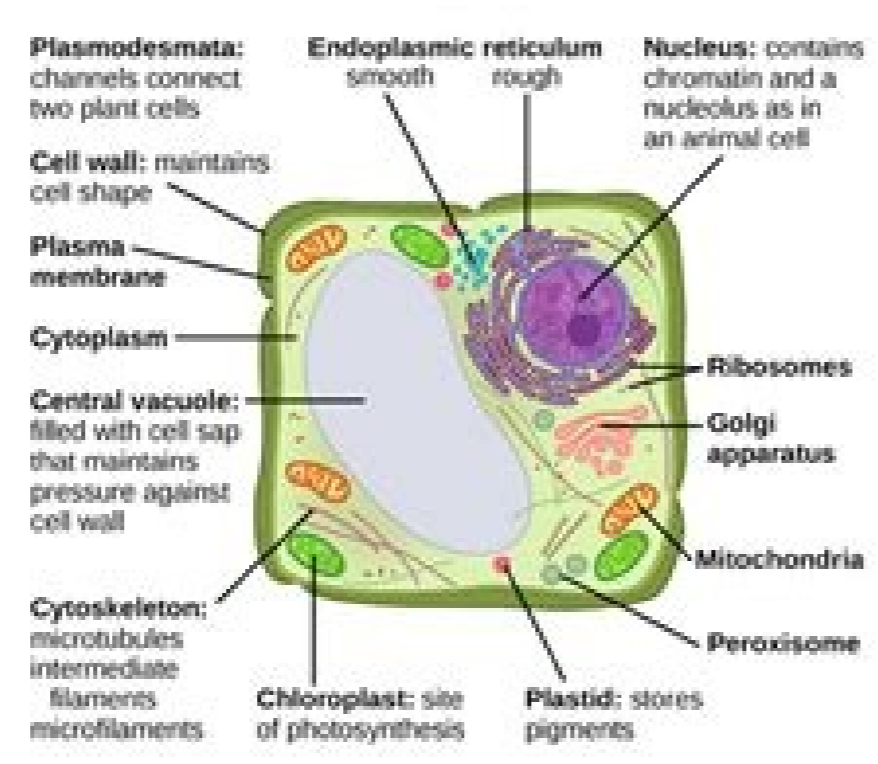
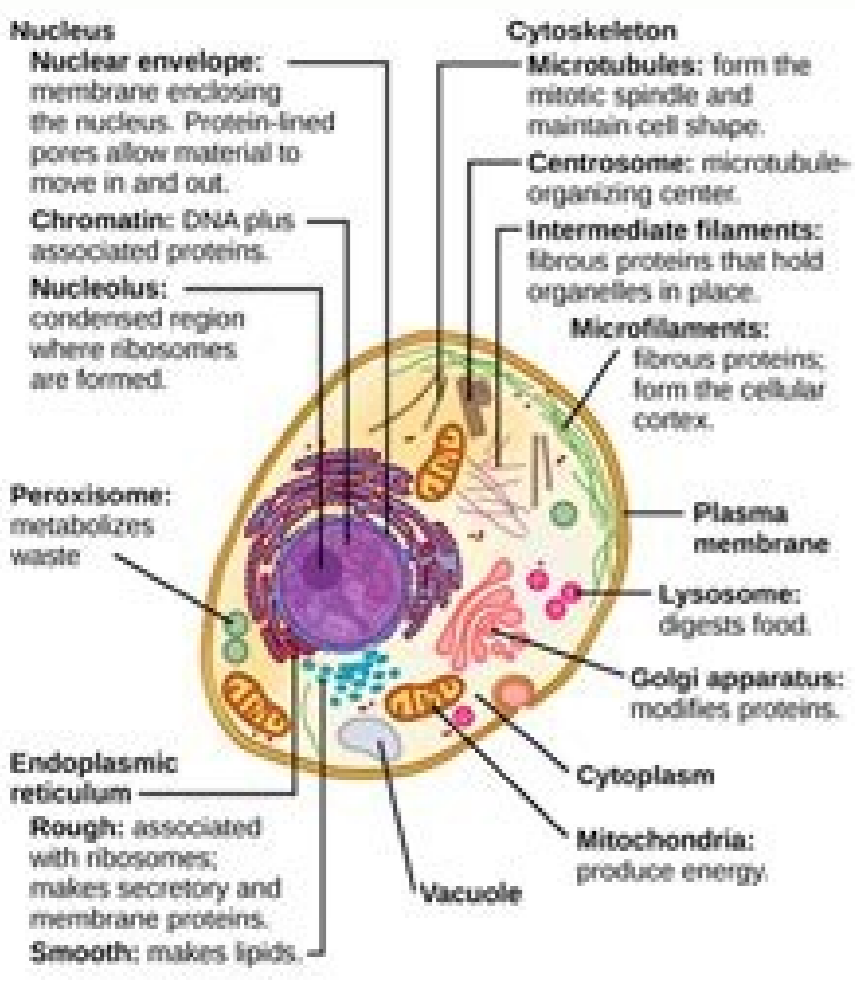
Cell Structure and Function
Two Diagrams

Diagram 1:
 1. Label the organelles.
 2. Describe the function of each organelle.

- Diagram 2:**
 1. Label the organelles.
 2. Describe the function of each organelle.
 3. Compare the two diagrams and explain the differences.

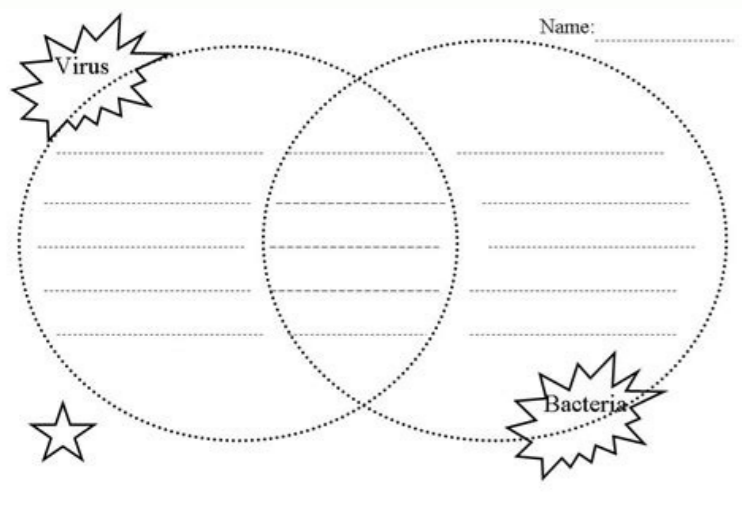
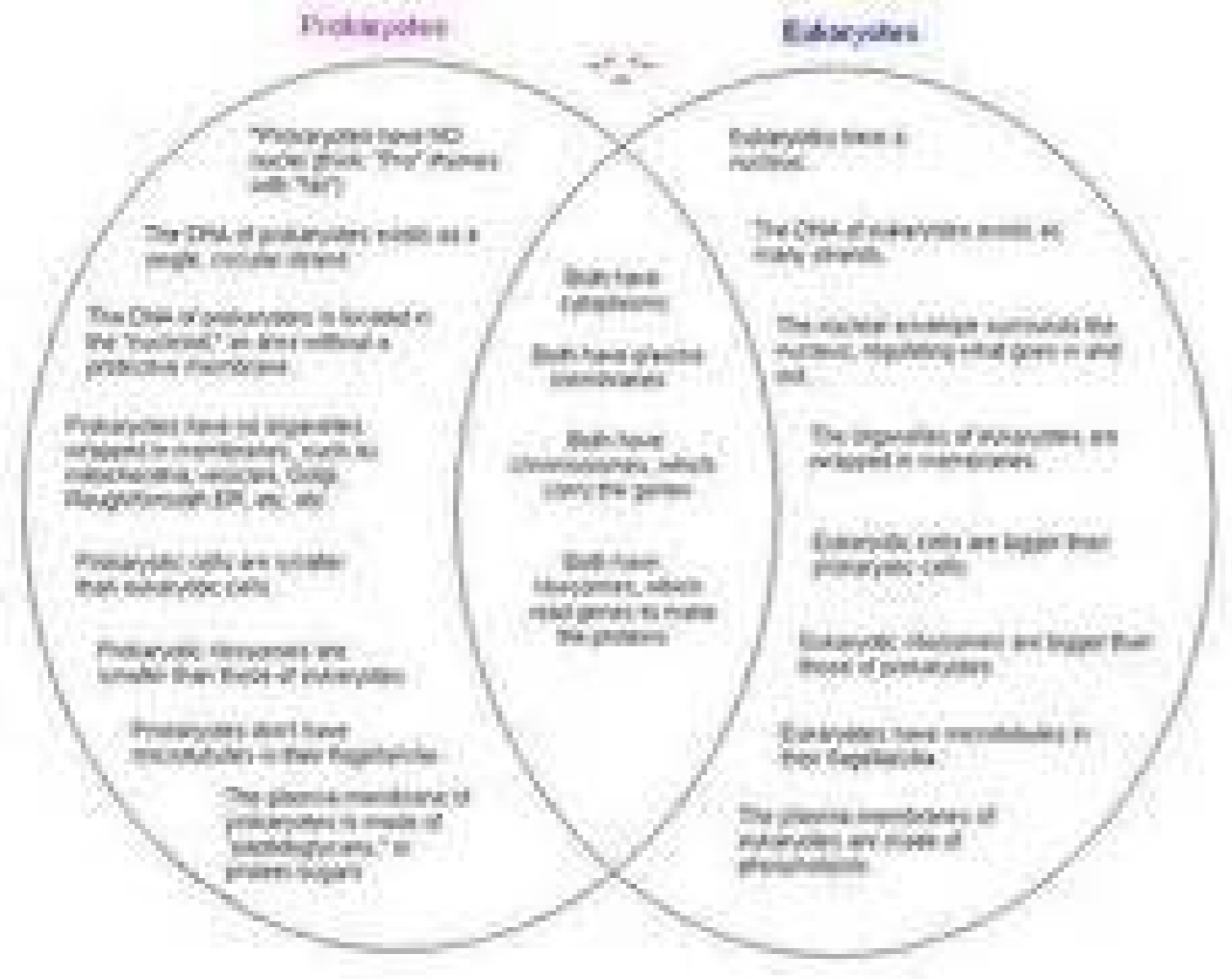


Worksheet:
 Name: _____
 Date: _____
 Class: _____



Quiz & Worksheet - Photosynthesis Biology Lab

1. A student observes that the green leaves of a plant are turning yellow. What could be the cause of this?
 - a. Lack of sunlight
 - b. Lack of water
 - c. Lack of nutrients
 - d. Lack of carbon dioxide
2. A student observes that the green leaves of a plant are turning yellow. What could be the cause of this?
 - a. Lack of sunlight
 - b. Lack of water
 - c. Lack of nutrients
 - d. Lack of carbon dioxide
3. Which of the following is not a product of photosynthesis?
 - a. Glucose
 - b. Oxygen
 - c. Carbon dioxide
 - d. Water



Prokaryotic and eukaryotic cells venn diagram answers. What are some differences between prokaryotic and eukaryotic.

Something went wrong. Wait a moment and try again. Venn diagram of prokaryotes and eukaryotes is an easy way to study similarities and differences. For this, knowledge of prokaryotes and eukaryotes is necessary. In 1665, British scientist, Robert Hooke first discovered the cells during examining a cork piece under his self-made microscope. It took scientists centuries to completely understand the basic structure of cells due to a lack of suitable equipment. During the 19th century, Schleiden and Schwann laid the foundation of cell theory. What are the characteristics of prokaryotes and eukaryotes? A cell is the structural and functional unit of life. Cells are divided into two different types according to their structure.

1. Prokaryotes: Prokaryotes word is made up of two words Greek words "pro" meaning before and "karyon" meaning nucleus. They do not have a true nucleus and membrane-bounded organelles. Prokaryotes are divided into two groups i.e., bacteria and archaea.
2. Eukaryotes: In eukaryotes, "Eu" meaning true and "karyon" meaning nucleus. They have a true nucleus and contain membrane-bounded organelles. Eukaryotes include animal, plants, fungi, and protists.

What are the similarities between Prokaryotes and Eukaryotes? There are many similarities between prokaryotes and eukaryotes. They have DNA as heredity material. Both cells have many ribosomes to produce protein. Their cellular content is enveloped by a thin and elastic cell membrane which is made up of phospholipid bilayer. They both have cytoplasm. What are the differences between Prokaryotes and Eukaryotes? The differences between prokaryotes and eukaryotes are compiled in the table below.

Prokaryotes Structure: Prokaryotes are very simple in structure. Eukaryotic cells are much complex than Prokaryotes. Nucleus They do not have a prominent nucleus. Their DNA floats near the midpoint of the cytoplasm and called nucleoid. They have a prominent nucleus containing nucleolus and nucleoplasm enveloped by the nuclear membrane.

Size: Prokaryotic cells are smaller in size. The cell diameter range from 0.1 to 5 μm. Eukaryotic cells are ten times larger in size as compared to prokaryotic cells. Their cell diameter ranges from 10 to 100 μm.

Cell wall: The prokaryotic cell wall is made up of peptidoglycan or murein. Peptidoglycan or murein is made up of many molecules of sugars and amino acids. The eukaryotic cell wall is made up of cellulose or chitin. The cellulose cell wall is present in plant cells while the chitin cell wall in part of the fungi cell.

Ribosomes: The ribosomes in the prokaryotic cell are small in size and nonenveloped. They have large ribosomes bounded by a membrane. Cell organelles: Cell organelles in prokaryotes do not have a cell membrane. Eukaryotic cells contain membrane-bounded organelles such as the Golgi apparatus, mitochondria, endoplasmic reticulum.

Number of cell: Prokaryotes are unicellular i.e., made up of one cell such as bacteria. Eukaryotes are unicellular (single cell) as well as multicellular (many cells) for example fungi, animal, plant and protists.

Prokaryotes and Eukaryotes Venn diagram: Below is a venn diagram to help you understand this topic in easy way. You can download the venn diagram of prokaryotes and eukaryotes in pdf below.

Some question and answer:

- Q1. State one structural feature absent in a bacterial cell that is always present in a plant cell? A. Bacterial cells lack cell walls and nucleus which are present in the plant cell.
- Q2. What are 4 examples of eukaryotic cells? A. Animal, plant, fungi, and protists are four examples of prokaryotes.
- Q3. Is human eukaryotic? A. Yes, the human body is made up of eukaryotic cells.
- Q4. What are eukaryotes? A. Eukaryotes are true cells. They contain a nucleus and membrane-bounded organelles.
- Q5. Are viruses eukaryotic? A. No, viruses are neither eukaryotic nor prokaryotic. Find the worksheet related to prokaryotes and eukaryotes here. For more worksheets click here. When students can manipulate, sort, and categorize information, they are more likely to retain the information. By using the Venn diagram to compare

