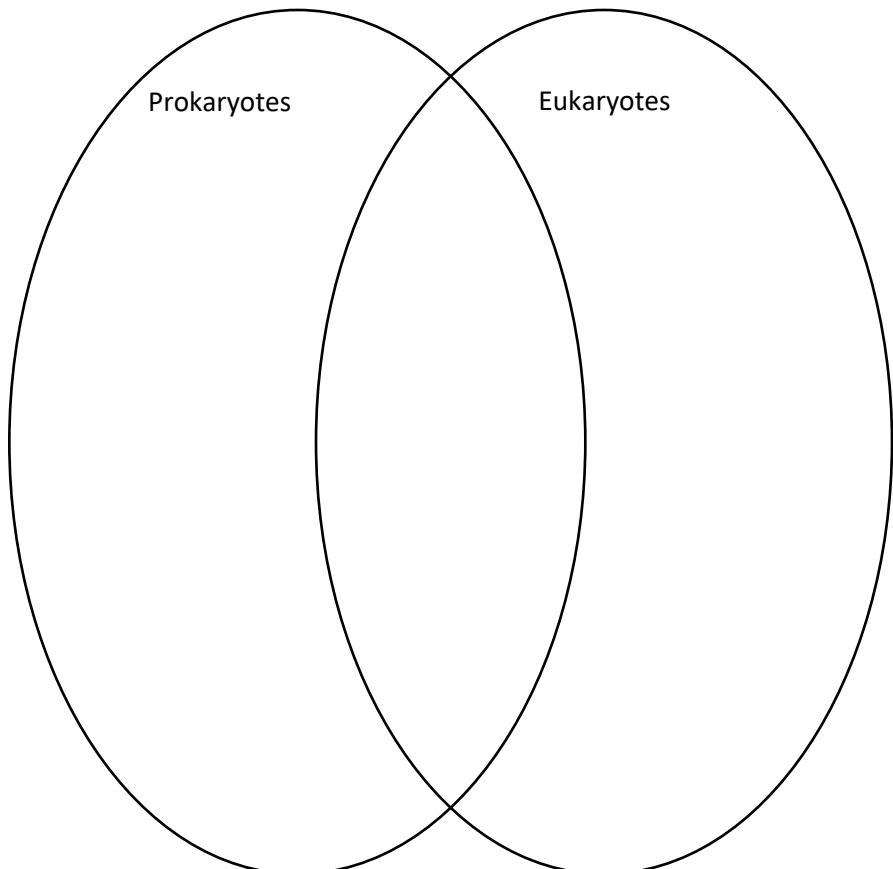


Name _____ Date _____

Prokaryotes vs Eukaryotes

Fill in the Venn diagram using the following statements. Place each statement in 1 space.

- no nucleus
- has DNA
- has ribosomes
- has nucleus
- all unicellular
- multicellular or unicellular
- has mitochondria
- contains cytoplasm
- example:bacteria
- example: animal
- smaller cells
- larger, complex cells
- no membrane-bound organelles
- has organelles
- surrounded by cell membrane

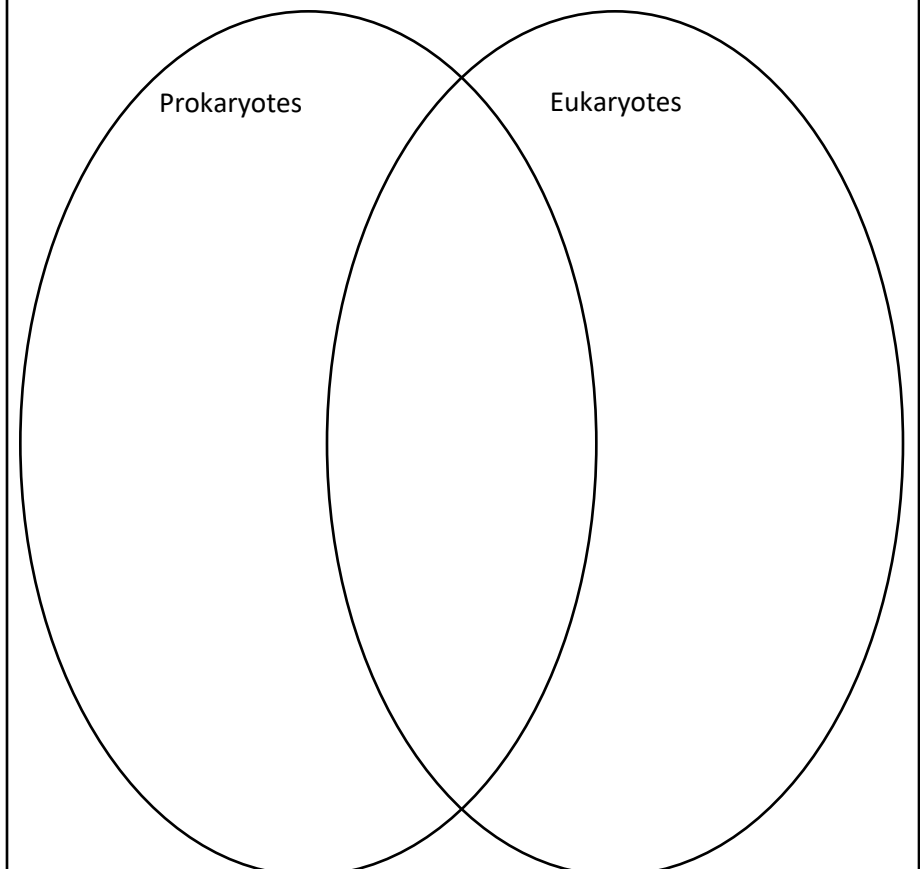


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Name _____ Date _____

Cell Theory

Match the scientists with their contribution to our understanding of cells.

- A. Robert Hooke
- B. Francesco Redi
- C. Theodor Schwann
- D. Anton von Leeuwenhoek
- E. Robert Remak
- F. Matthias Schleiden

- _____ 1. Discovered that plants are made of cells
- _____ 2. Viewed cork under a microscope and saw cells
- _____ 3. Disproved "spontaneous generation"
- _____ 4. Discovered that cells come from preexisting cells
- _____ 5. Improved microscopes and discovered bacteria
- _____ 6. Discovered that animals are made of cells

List the 3 main points of the Cell Theory:

- 1. _____
- 2. _____
- 3. _____

Name _____ Date _____

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Name _____ Date _____

Prokaryotes vs Eukaryotes

1. What is the main difference between prokaryotic and eukaryotic cells? _____
2. What are the 4 things that all cells have in common?
 - a. _____
 - b. _____
 - c. _____
 - d. _____
3. Which of the following is not a part of the Cell Theory?
 - a. All cells come from preexisting cells
 - b. Cells are the basic unit of life
 - c. All cells are made of complex organelles
 - d. All living things are comprised of one or more cells
4. Sketch and label these parts of a prokaryotic cell: DNA, flagella, cell membrane, ribosomes, cytoplasm, cell wall

Name _____ Date _____

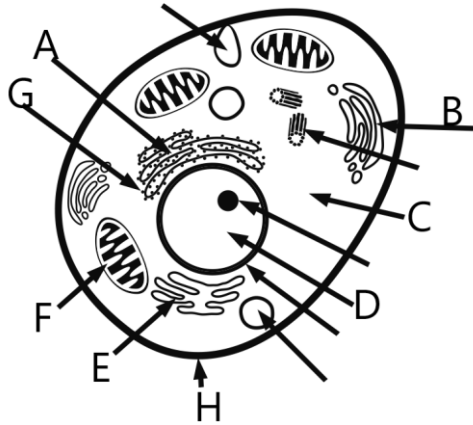
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Name _____ Date _____

Plant and Animal Cell

Use the picture to fill out the table below.



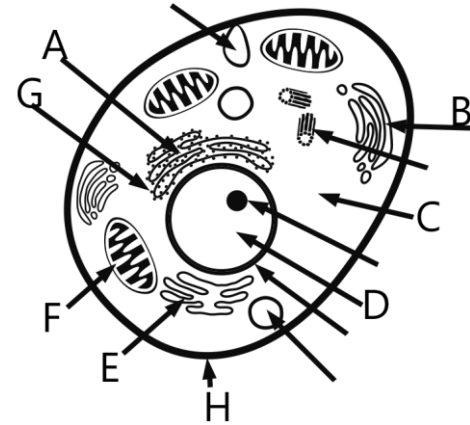
Organelle	Letter	Function	Plant/ Animal/ Both
Cytoplasm			
Golgi body			
Smooth endoplasmic reticulum			
Rough endoplasmic reticulum			
Mitochondria			
Ribosome			
Nucleus			
Cell membrane			

Name two structures that plant cells have the animal cells do not:

Name _____ Date _____

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Organelle	Letter	Function	Plant/ Animal/ Both
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Cell Organelles

Answer the following questions about cell organelles.

2. This organelle contains the DNA for eukaryotic cells.
 - a. Ribosome
 - b. Nucleus
 - c. Mitochondria
3. This organelle is like the FedEx of the cell; it modifies and packages products for shipping.
 - a. Golgi body
 - b. Mitochondria
 - c. Smooth ER
4. This organelle is the “powerhouse of the cell” because it produces ATP for the cell.
 - a. Ribosome
 - b. Chloroplast
 - c. Mitochondria
5. This organelle is used by autotrophs to carry out photosynthesis.
 - a. Mitochondria
 - b. Chloroplast
 - c. Endoplasmic reticulum
6. This organelle produces proteins for the cell. They may be free in the cell or attached to the endoplasmic reticulum.
 - a. Ribosome
 - b. Nucleus
 - c. Mitochondria
7. This organelle produces lipids for the cell and helps to detoxify the cell.
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Name _____ Date _____

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Name _____ Date _____

Plant and Animal Cells

Which organelle do you believe is the most important? _____

Write a brief explanation of why using Claim, Evidence, Reasoning.

Find someone close to you that chose a different organelle. Read your explanations to each other.

What organelle did they choose and why? _____

Did they convince you to change your answer? _____

Find one more person and repeat.

What organelle did they choose and why? _____

Did they convince you to change your answer? _____

Name _____ Date _____

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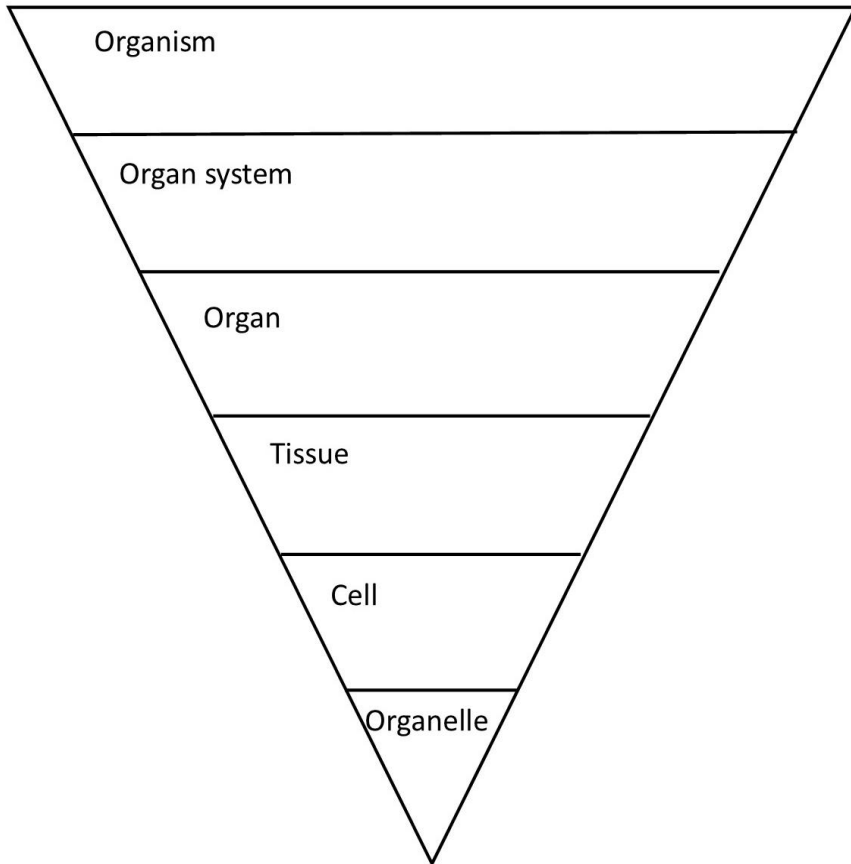
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Name _____ Date _____

Levels of Organization

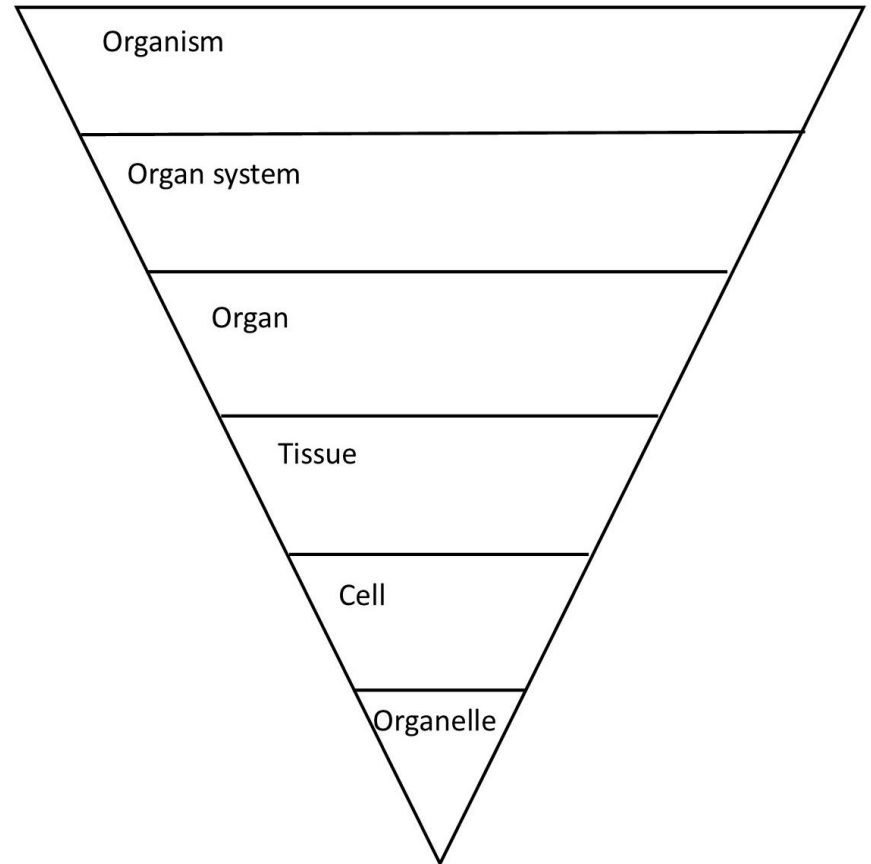
In each level sketch an example of what belongs in the group. Start with your favorite organism and then work your way down. Each lower level should be part of the level above it. Be sure to label your sketches.



Name _____ Date _____

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Name _____ Date _____

Viruses

Sketch and label the basic parts to a virus.

What are 2 things viruses had in common with cells? _____

What are 4 differences between viruses and cells? _____

How do viruses make us sick? _____

What can you do to fight the transmission of viruses? _____

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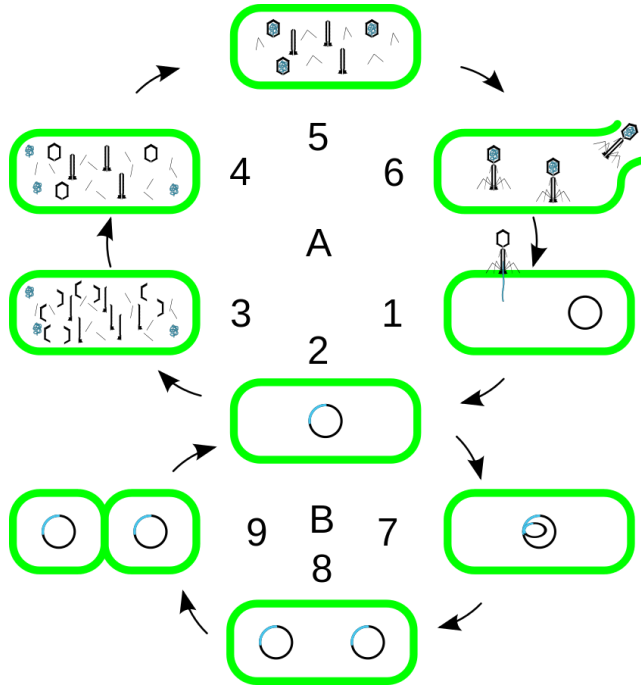
Name _____ Date _____

Viral Infections

Refer to the picture.

Part A represents the lytic cycle of a viral infection. Explain what is happening in the pictures 1-6.

1. _____
2. _____
3. _____
4. _____
5. Same as 4
6. _____



Part B represents the lysogenic cycle. How is this cycle different from the lytic cycle? _____

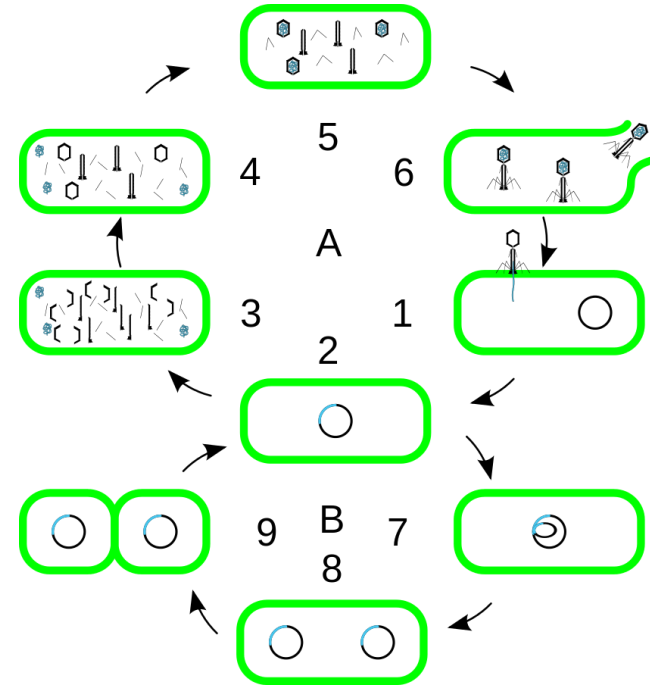
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