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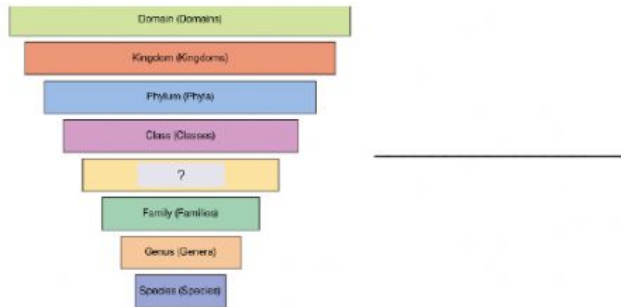
Prokaryotes, Eukaryotes, Bacteria, And Viruses

1. What type of biomolecule are enzymes?
 - a. Lipids
 - b. Proteins
 - c. Nucleic Acids
2. Which property is shared by all living things?
 - a. All living things need sunlight
 - b. All living things move
 - c. All living things are made of 1 or more cells
3. Match the biomolecules with the elements
 1. Carbohydrates _____
 2. Lipids _____
 3. Nucleic Acids _____
 4. Proteins _____
 - a. CHON
 - b. CHO
 - c. CHONP
 - d. CHO
4. An organism is eukaryotic, unicellular, and autotrophic. What is its classification?
 - a. Bacteria
 - b. Protista
 - c. Plantae
5. What organelle packages and sorts molecules?
 - a. Golgi apparatus
 - b. Rough endoplasmic reticulum
 - c. Nucleus
6. What structure holds the **DNA** of the cell?
 - a. Capsid
 - b. Cytoplasm
 - c. Ribosomes
 - d. Nucleus
7. What kingdom are viruses in?
 - a. Bacteria
 - b. Animalia
 - c. None of the above

8. What is the main function of the biomolecule **carbohydrates**?

- Short-term energy
- Long-term energy
- Muscle-building

9. What is the missing category of the taxonomic hierarchy?



10. Select the correct comparison between eukaryotic and prokaryotic cells.

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Eukaryotic Cells	Prokaryotic Cells
<ul style="list-style-type: none"> Membrane-bound nucleus or organelles DNA chromosomes in the nucleus 	<ul style="list-style-type: none"> No nucleus or other membrane-bound organelles DNA chromosome in the cytoplasm

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Eukaryotic Cells	Prokaryotic Cells
<ul style="list-style-type: none"> Membrane-bound nucleus or organelles DNA chromosomes in the cytoplasm 	<ul style="list-style-type: none"> No nucleus or other membrane-bound organelles DNA chromosome in the cytoplasm

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Eukaryotic Cells	Prokaryotic Cells
<ul style="list-style-type: none"> No membrane-bound nucleus or organelles DNA chromosomes in the cytoplasm 	<ul style="list-style-type: none"> Membrane-bound nucleus or organelles DNA chromosome in the nucleus

J

Eukaryotic Cells	Prokaryotic Cells
<ul style="list-style-type: none"> No membrane-bound nucleus or organelles DNA chromosomes in the nucleus 	<ul style="list-style-type: none"> Membrane-bound nucleus or organelles DNA chromosome in the nucleus

11. What structure do prokaryotic cells, eukaryotic cells, and viruses share?

- Capsid
- Cytoplasm
- Genetic Material
- Nucleus

12. A student has four samples detailed below. Which sample most likely contains a virus?

Sample	Nucleus	Chloroplast	Ribosome
Sample 1	Present	Present	Present
Sample 2	Absent	Absent	Present
Sample 3	Absent	Absent	Absent
Sample 4	Present	Absent	Present

- a. Sample 1
- b. Sample 2
- c. Sample 3

13. Which of the four samples from question 12 most likely contains plant cells?

- a. Sample 1
- b. Sample 2
- c. Sample 3

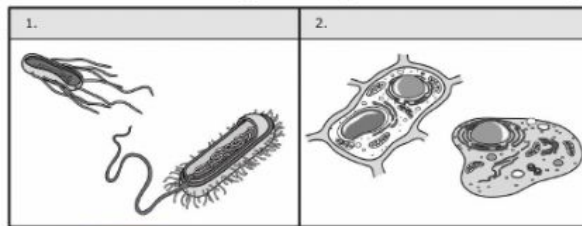
14. Match the vocabulary words with their definitions

- | | |
|----------------------|----------------------|
| 1. Prokaryotes _____ | a. Non-living |
| 2. Eukaryotes _____ | b. No nucleus |
| 3. Biotic _____ | c. Do have a nucleus |
| 4. Abiotic _____ | d. Living |

15. What are the chloroplasts in plant cells used for?

- a. Cellular respiration
- b. Photosynthesis
- c. Waste management

16. What table heading should you use for the two groups below?



1. Plant 2. Animal
1. Protista 2. Eukarya
1. Prokaryotes 2. Eukaryotes

17. What characteristics do protista and animalia have in common?

<p>F</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <ul style="list-style-type: none"> • Motile • Reproduce sexually • Photosynthetic </div>	<p>H</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <ul style="list-style-type: none"> • Eukaryotic • Motile • Reproduce sexually </div>
<p>G</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <ul style="list-style-type: none"> • Motile • Multicellular • Photosynthetic </div>	<p>J</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <ul style="list-style-type: none"> • Motile • Prokaryotic • Multicellular </div>

18. What part of the virus helps it invade a host?

- Genetic materia
- Envelope
- Spike proteins

19. Fill in the chart to match the kingdoms with the correct domains using the word bank

Bacteria	Archaea	Eukarya
Word Bank: Plantae, Animalia, Eubacteria, Fungi, Archaeobacteria, Protista		

20. Fill in the chart to match the correct properties to the biomolecule using the word bank

Biomolecule	Elements	Monomer	Example
Carbohydrates		Monosaccharides	
	CHO		Oil, butter
	CHON		
Nucleic Acids		Nucleotides	DNA
Word Bank: Proteins, Lipids, Meat, Pasta, Amino Acids, Fatty Acids, CHO, CHONP			

BONUS: Draw a picture of what you want to be when you grow up!