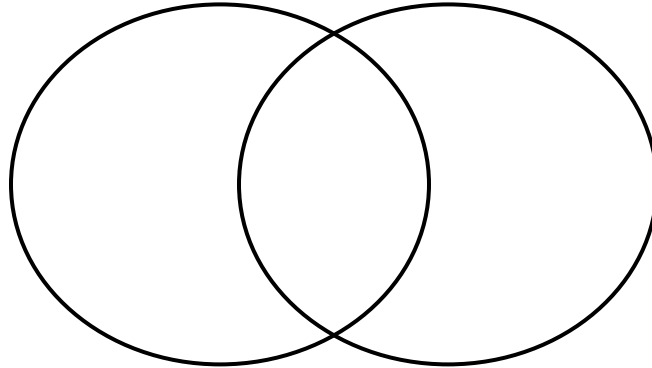
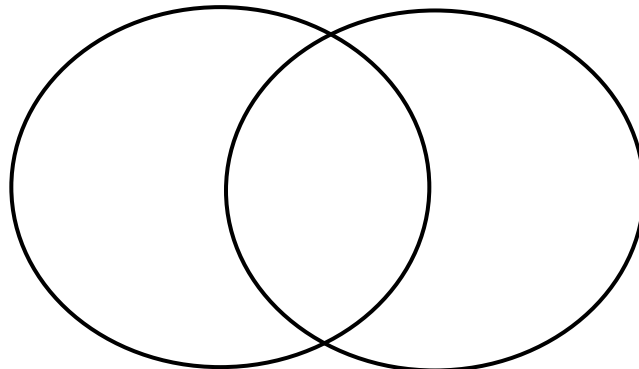


Possible Unit 3 Free Response Questions

- Compare** and **contrast** the structure of prokaryotic and eukaryotic cells. [10]
 - Discuss** the Endosymbiotic Theory in terms of the evolution of eukaryotic cell being sure to **explain** three observations that support it. [10]



- One characteristic of eukaryotic cells is the presence of membrane-bound organelles. These membranes allow for the compartmentalization essential for organelles to perform their specialized biochemical functions.
 - Explain** how compartmentalization allows the following organelles to perform their functions: [9]
lysosome - peroxisome - sER
 - Compare** and **contrast** the structure of mitochondria and chloroplast. [10]



- Proteins are large, complex, organic macromolecules that are the building blocks of all living things. **Describe** the *production, modification* and *pathway* of a secretory protein from the DNA code to its export from the cell. [20]
- Microscopy
- Surface Area : Volume Calculations