

# Cell Structure and Function

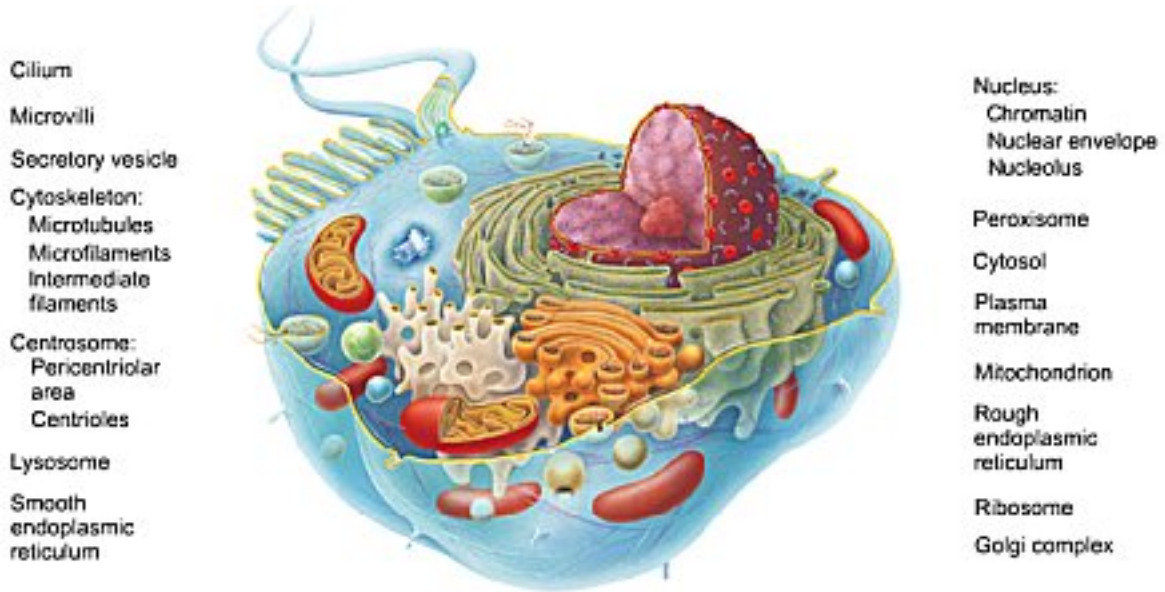
## Directions:

Insert and install your Interactions: Foundations CD.

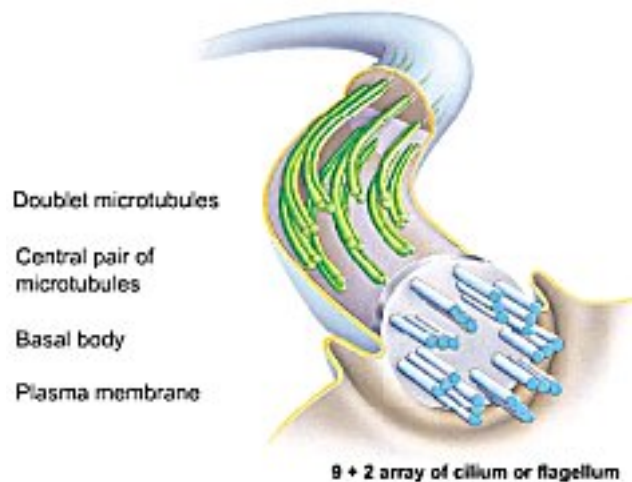
- a. Click the "Contents" button.
- b. Open the *Cellular Level of Organization* file.
- c. Click on *Anatomy Overviews*.
- d. Work through *Cell Structure and Function*.



- 1. Define cells' role in the body. \_\_\_\_\_
- 2. Identify each of the following:



- 3. Click the cilium to learn more about their structure (and flagella).
  - a. Describe the function of ciliated and flagellated cells in the body. \_\_\_\_\_
  - b. Identify the following cilia and flagella anatomy.

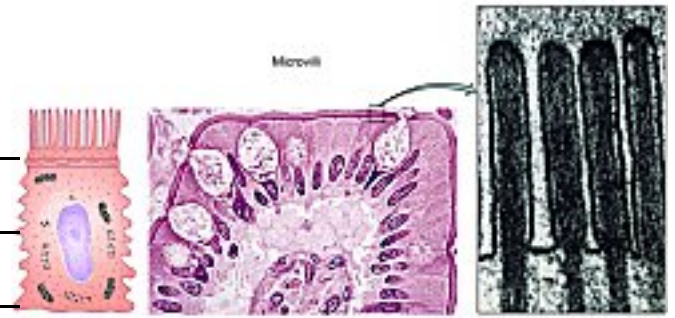


4. Return to the *Generalized Cell* homepage and click *Microvilli*.

a. Describe microvilli function. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



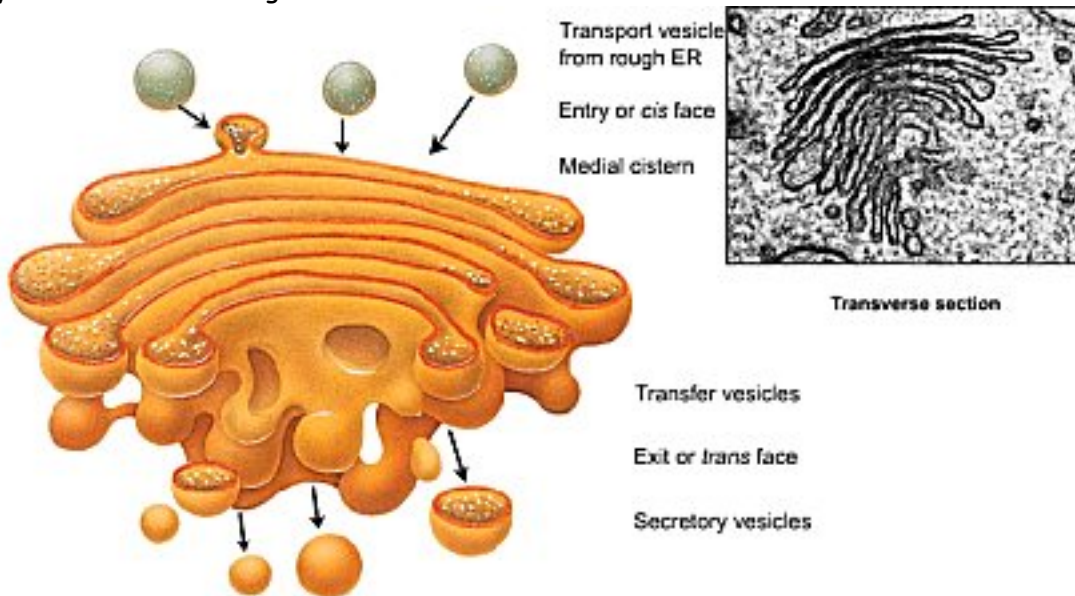
5. Return to the *Generalized Cell* homepage and click *secretory vesicle* or *golgi complex*.

a. Describe secretory vesicle functions. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b. Identify each of the following:



6. Return again to the *Generalized Cell* homepage and click on *cytoskeleton*.

a. Name the three types of cytoskeletal structures.

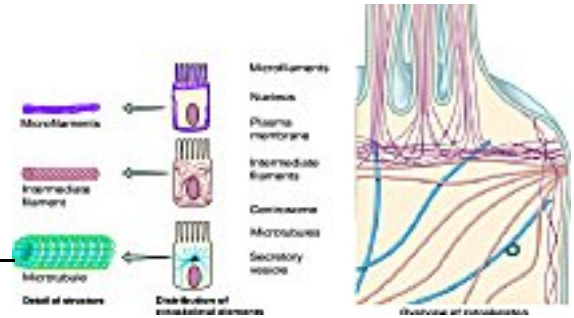
\_\_\_\_\_

b. Describe three primary cytoskeletal functions.

\_\_\_\_\_

\_\_\_\_\_

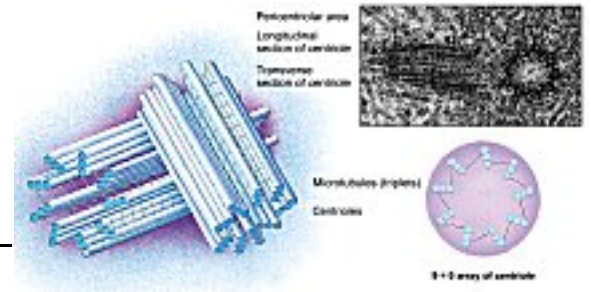
\_\_\_\_\_



7. Click on the *Centrosome* from the *Generalized Cell* homepage.

a. What are the functions of the *pericentriolar area* and the *centrioles*?

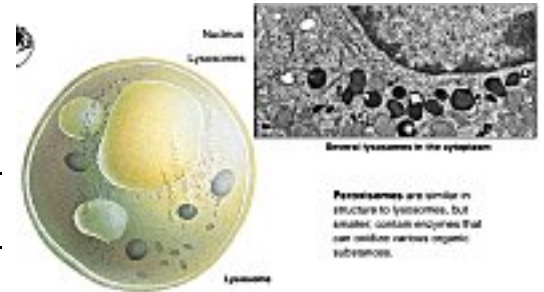
\_\_\_\_\_



8. Back to the *Generalized Cell* homepage. This time investigate *lysosomes* or *peroxisomes*.

a. Explain lysosome functions.

\_\_\_\_\_  
\_\_\_\_\_



b. How are peroxisomes similar and how are they different?

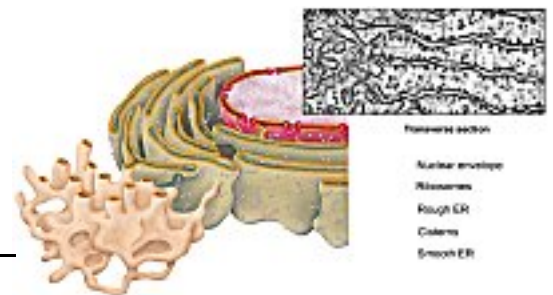
\_\_\_\_\_

9. From the *Generalized Cell* homepage, click either *Smooth* or *Rough Endoplasmic Reticulum*.

a. Describe the function of:

*smooth ER* - \_\_\_\_\_

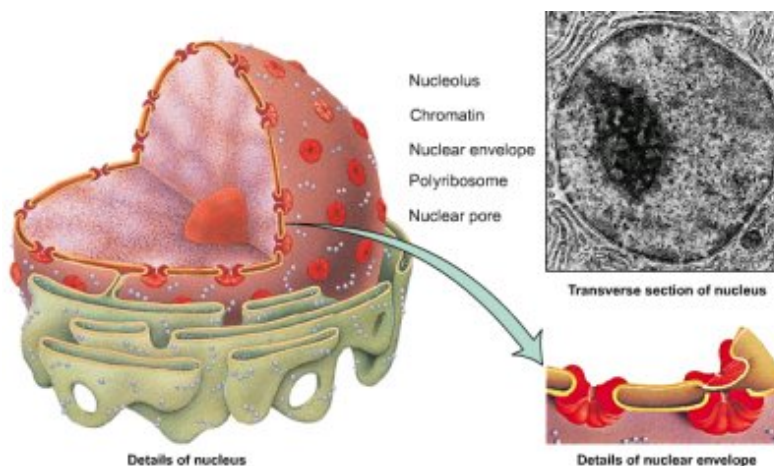
*rough ER* - \_\_\_\_\_



10. Return again to the *Generalized Cell* homepage. Click the *nucleus*.

a. Describe nucleus function.

b. Identify each of the following.

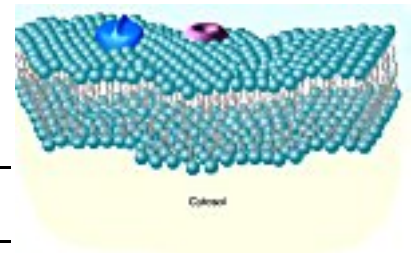


11. Return to the *Generalized Cell* homepage and investigate the *cytosol*.

a. What is the importance of the cytosol? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



12. Back from the *Generalized Cell* homepage, click the *plasma membrane*.

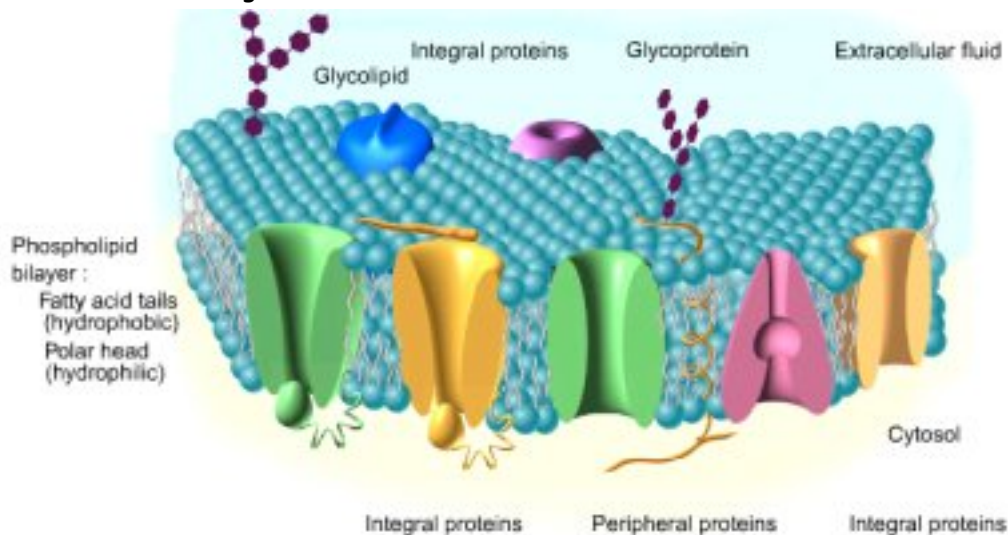
a. Explain the various functions of the plasma membrane. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

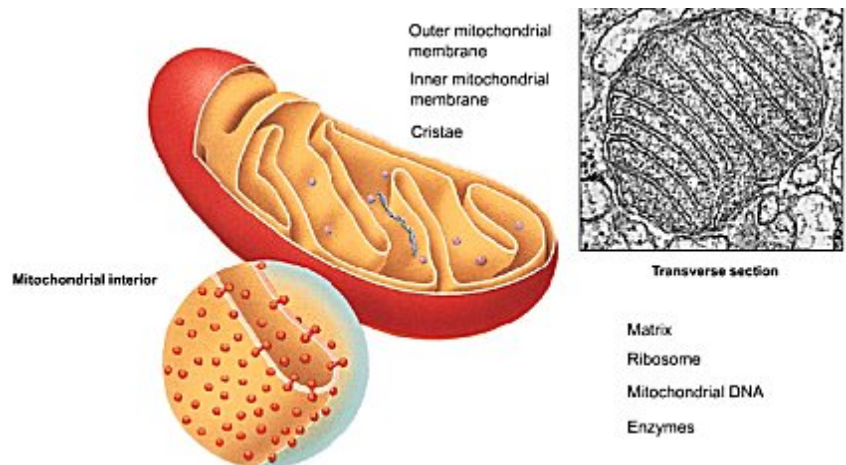
b. Identify each of the following:



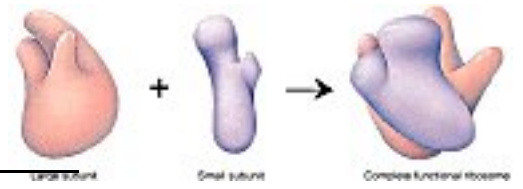
13. Click the *mitochondria* from the *Generalized Cell* homepage.

a. Explain mitochondria function. \_\_\_\_\_

b. Identify each of the following:



14. With one last trip back to the *Generalized Cell* homepage, investigate *ribosomes*. Describe ribosome function.



---