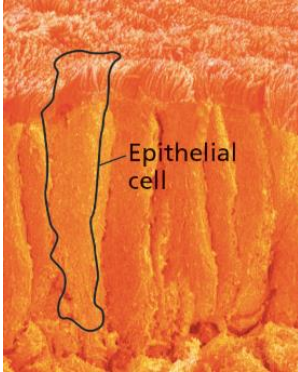


## A Tour of the Cell Review

### Chapter 6

1. Identify the key difference between prokaryotic and eukaryotic cells that is the basis of the name of the two types of cells.
2. Describe the meaning of the word cytoplasm as it applies to both prokaryotic and eukaryotic cells.
3. Describe the function of the nucleus, the mitochondrion, the chloroplast, and the endoplasmic reticulum.
4. Your friend says that plant cells don't have mitochondria because they get their energy from photosynthesis. Provide reasoning to refute the statement.



5. The cells in this SEM are epithelial cells in the small intestine. Describe how their structure contributes to their specialized function of nutrient absorption.

6. Describe the role of the ribosome in the expression of genetic information.
7. Use the example of the lysosome to explain the importance of compartmentalization to cells.
8. Imagine a protein is to be exported from the cell and requires modification in the Golgi before it is functional. Trace the path of the protein through the cell starting with the mRNA in the nucleus.
9. Describe how the mitochondrion and chloroplast provide evidence for the endosymbiont theory.