

## Chapter 7

### Eukaryotic Animal and Plant Cell

Use your book, CD ROM, the amazingly cool websites in the web resources section of the website and/or any other resources to learn how to identify and describe the functions of the cellular structures found in a typical **eukaryotic animal cell** and **eukaryotic plant cell**.

#### **Learning Objectives:**

- You must be able to *identify* these structures on an illustration (like figure 7.7 & 7.8 on page 108)
- You must know the *functions* of each of these organelles, structures, etc. Write a description of the function below.

#### **Eukaryotic Animal Cell**

1. Plasma membrane (cell membrane)
  
2. Cytosol (cytoplasm)
  
3. Nucleus
  - a. Chromatin vs. Chromosomes
  
  - b. Nucleolus
  
  - c. Nuclear Envelope
  
4. Centrosome
  - a. Centriole
  
5. Ribosomes
  
6. a. Rough Endoplasmic Reticulum (ER)  
  
- b. Smooth Endoplasmic Reticulum (ER)
  
7. Golgi Apparatus
  
8. Lysosome

9. Peroxisome

10. Vacuoles

11. Mitochondria

a. Cristae

b. Mitochondrial Matrix

11. Cytoskeleton

a. Microtubules

b. Microfilaments

c. Intermediate Filaments

## **Eukaryotic Plant Cell**

A plant cell is similar to an animal except in addition it has:

1. Cell wall

2. Chloroplasts

3. Water vacuole