

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Read Chapter 7 and complete the following "learning points"**

Microscope, meaning \_\_\_\_\_, opened up the study of life by \_\_\_\_\_.

The microscopic study of plant and animal tissues led scientists to propose the \_\_\_\_\_ that states:

- I. \_\_\_\_\_
- II. \_\_\_\_\_
- III. \_\_\_\_\_

All living things are made of \_\_\_\_\_, the smallest units that can be alive. The essential components of life on Earth are "compartmentalized" in two basic structures. The major difference between these two compartments types is \_\_\_\_\_

\_\_\_\_\_ or \_\_\_\_\_, meaning "small tools". The "compartments" that organizes the structure of all life on Earth come in two basic flavors \_\_\_\_\_ or "before the carrier bag" without a nucleus and much smaller and simpler than and \_\_\_\_\_ or "good carrier bag" with a nucleus.

Read or skim pages 460-463. All life on Earth is classified based on these two types of compartments. Groupings of organisms whose basic compartment structure contains a nucleus include \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. The lone group of organisms whose compartment does not contain a nucleus would be the \_\_\_\_\_.

Complete the following table:

Compartment Type	_____	Prokaryote
Contains "Small Tools"	Yes	_____
Complexity (high/low)	_____	_____
Includes life-forms like...	_____	_____
Contains a Nucleus	_____	_____

Maintaining equilibrium or \_\_\_\_\_ (steady state) in a "living compartment" or \_\_\_\_\_ depends on its \_\_\_\_\_. To do this, it must allow only certain substances to "glide through", a characteristic known as \_\_\_\_\_. Read and do the **Problem Solving Lab 7-1** on page 182. Attach your answers to this reading worksheet.

Complete the following table:

"Anatomy" of Life's Boundary or _____	
Its Major Building Block	_____
The Basic Layout	_____
Other Building Blocks	_____