

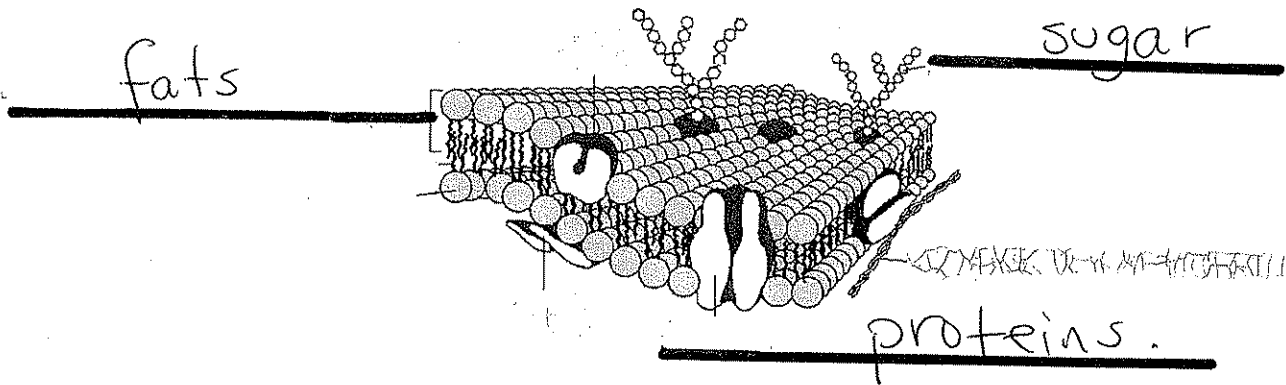
Name: _____ Date: _____

Life Science Notes 7 The Cell I

Why study cells?

- The Cell Theory can help us understand the importance of cells.
 1. All Organisms are made up of one or more cells.
 2. Cells are the basic unit of structure and function in all organisms.
 3. All cells come from other cells.

The Cell Membrane



- The cell membrane is composed of two main parts:
 - A double layer of fats and
 - proteins
- The function of the cell membrane is to be a protective barrier between the cell and the environment it is in.
 - The membrane allows important molecules such as oxygen and water to move into the cell and allows wastes to move out.
 - The cell membrane protects the cell from unwanted molecules in the cell's environment.

Selective permeability

Cytoplasm

- The inside of the cell is filled with a gel-like substance called cytoplasm.
 - The substance is mostly made of water.
 - It also contains other chemicals.
- The cytoplasm is constantly moving as a stream would. This is important, because it allows organelles to move around and do their jobs.

Organelles

- Floating around in the cytoplasm are structures called organelles, which perform all of the functions of a cell. Some of these functions are:
 - gather materials
 - make energy
 - get rid of wastes
- The organelles are controlled by the "control center of the cell," called the nucleus. Like a manager, the nucleus directs all of the activities of the cell.

