

# Different Jobs of Cells Notes

1. Your body is made up of many different types of specialized cells. A cell's size and shape are directly related to their function (job).

## Types of Human Cells

1. Fat cells store so much fat the nucleus gets pushed against the cell membrane.
2. Bone cells are surrounded by hard calcium and phosphorus; gives strength to the skeletal system.
3. Nerve cells are long and have many branches; they receive and deliver messages quickly.
4. Muscle cells are long and have many fibers that contract and relax so the body can move.
5. Skin cells are flat and very close together; they form a protective layer for the body.

## Types of Plant Cells

1. Leaf cells are brick-shaped and contain many chloroplasts.
2. Stem cells are long and tube-shaped; they move water and minerals quick and easy through the plant.
3. Root cells are block-shaped and do not contain chloroplasts. They absorb water and minerals.

Cell organization – cells are organized into systems that together perform functions that keep the organism alive.

1. Levels of cell organization range from simplest to complex.
  - a. Cell – the simplest level of cell organization.
  - b. Tissue – groups of similar cells that do the same sort of work.  
EX: muscle tissue, nerve tissue
  - c. Organ – different types of tissues working together.  
EX: the stomach is an organ that includes muscle tissue, nerve tissue, and blood tissue; other examples are the heart and kidney
  - d. Organ system – two or more organs working together to do a certain job.  
EX: respiratory system, digestive system
  - e. Organism – organ systems working together and is the most complex level of cell organization.  
EX: the muscular system works with the skeletal system to create movement for the organism.