

### Function Card

This tissue transports nutrients, wastes, respiratory gases, and other substances throughout the body.

### Stratified Squamous

This tissue is composed of many layers. The cells on the surface are flat but the cells touching the basement membrane tend to be more cuboidal shaped.

### Function Card

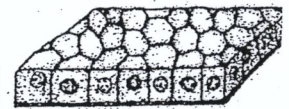
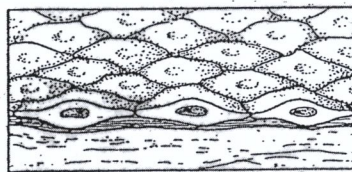
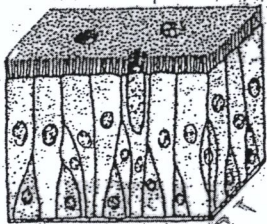
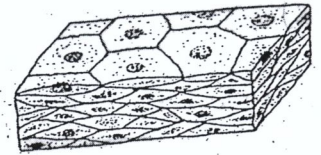
This tissue is thick and has many layers its primary function is protection.

### Function Card

The main function of this tissue is absorption and secretion. This tissue is especially abundant in the salivary glands and kidneys.

### Simple Cuboidal

This tissue is composed of a single layer of cells that are of equal height and width. All of the cells in this tissue are attached to a basement membrane.



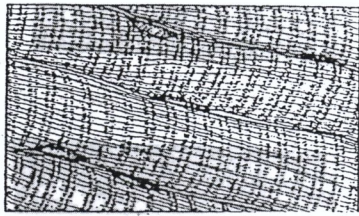
### Function Card

This tissue has goblet cells that secrete mucus that helps trap dust particles and bacteria. The cilia then move the trapped debris upward.

### Pseudostratified Ciliated Columnar

All of the cells of this tissue rest on a basement membrane. However, some of the cells are shorter than others so their nuclei appear at different heights above the basement membrane. This gives a false impression that this tissue has many cell layers. The cells are much taller than wide. Cilia, hair-like structures, are located on the surface of this tissue.



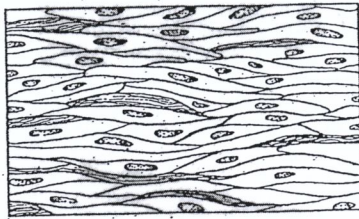


### Function Card

The main function of this tissue is to move the bones of the skeleton.

### Skeletal Muscle

The cells of this tissue are cylindrical with visible striations. The cells are so large they are multinucleated.



### Smooth Muscle

The cells of this tissue are pointed at each end. The individual cells have a single nucleus. No striations are visible in this tissue.

### Cardiac Muscle

The cells of this tissue are highly branched, striated, and uninucleated.

## Epithelial Tissue

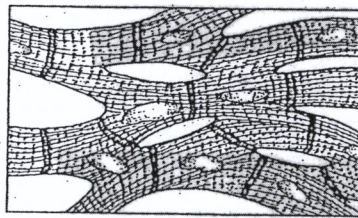
### Simple Squamous

This tissue is composed of a single layer of flat cells that all attached to the basement membrane.

## Muscle Tissue

### Function Card

This tissue protects, supports, provides a framework on which muscles can attach.

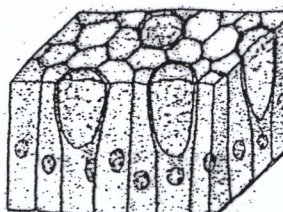


### Simple Columnar

A single layer of cells that are much taller than they are wide that are attached to a basement membrane. Dispersed among the tall cells are goblet cells.

### Function Card

This tissue is very thin and well suited for areas in which diffusion and filtration take place.



### Function Card

The main function of this tissue is to move the blood through the blood vessels.



### **Hyaline Cartilage**

Cells in this tissue are called chondrocytes. The cells are located in a clear capsule. The matrix of this tissue is clear with no visible fibers.

## **Connective Tissue**

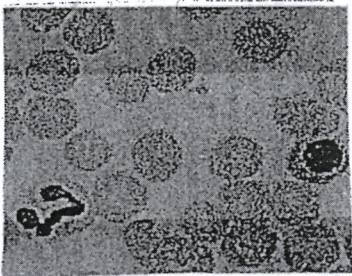
**Function Card**  
This tissue provides support and flexibility for the external ear.



### **Adipose Tissue**

The cells in this tissue are very large because they are stuffed full of fat. You can barely see the nucleus of each cell because the fat compresses it against the cell membrane. The tissue actually has a honey-comb appearance.

**Function Card**  
Supports and protects ends of long bones, provides flexibility where the ribs meet the sternum, and provides a framework for the fetal skeleton.



### **Function Card**

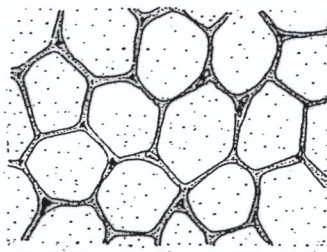
The main function of this tissue is to move fluids and other materials through organs.

### **Blood**

Cells of this tissue float around in a matrix of liquid. Red blood cells do not have a nucleus and are thinner in the middle (look clear). White blood cells are larger and have a dark stained nucleus.

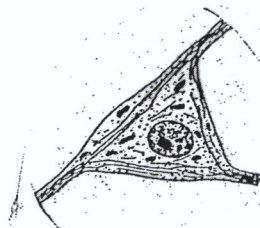
### **Nervous Tissue**

The main cell in this tissue is called a neuron. It is a triangular shaped cell with extensions.



**Function Card**  
This tissue insulates the body, cushions the organs, and can be a storage place for energy.

## **Nervous Tissue**



**Function Card**  
The function of this tissue is to receive and conduct impulse from one part of the body to another.

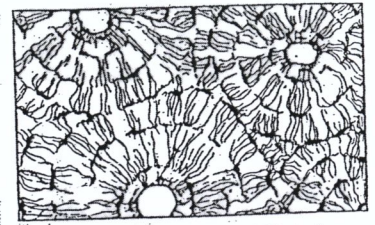


### Function Card

This tissue secretes digestive enzymes and absorbs nutrients.

### Compact Bone

This tissue looks like a bull eye. The reason that it looks like this is because it has many concentric layers of calcium.



### Areolar Tissue

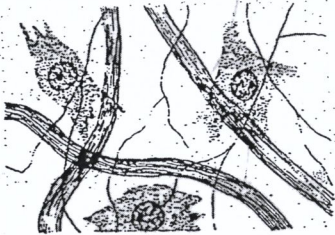
The cells in this tissue are very spread out. Inbetween the cells are two types of fibers. Collagen that are thick bundles of fibers and thin elastin fibers

### Fibrocartilage

Cells in this tissue are called chondrocytes. The cells are located in a clear capsule. They are separated by bundles of collagen fibers.

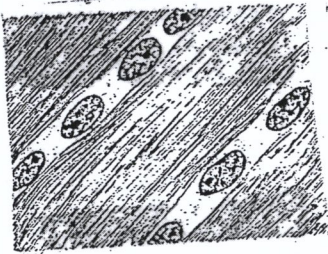
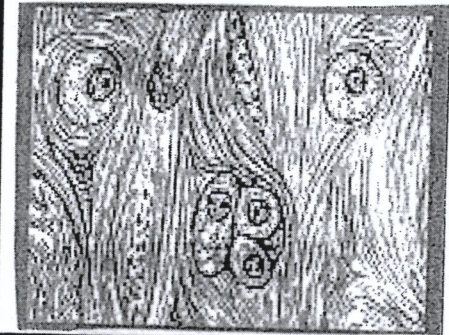
### Function Card

This tissue secretes digestive enzymes and absorbs nutrients.



### Function Card

This is a "cobwebby" tissue that supports and holds internal organs together and in their proper positions.

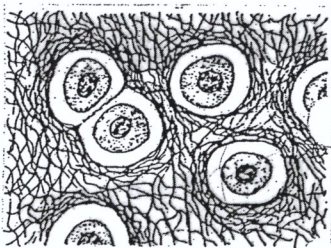


### White Fibrous (Dense)

The matrix of this tissue has bundles of collagen fibers. Located between the bundles of fibers are rows of fibroblast cells (fiber forming cells).

### Function Card

This tissue provides a cushion pad between the vertebra which protects them from injury.



### Elastic Cartilage

Cells in this tissue are called chondrocytes. The cells are located in a clear capsule. They are separated by thin (wavy) elastin fibers.

### Function Card

This tissue connects bones to bones and bones to muscles.