



## Tissues of the Body

**Tissue:** group of cells with similar structure and function.

Name	Main Function	Cells	Intercellular Matrix	Other Characteristics
<b>Epithelial</b>	Protection	Abundant cells. Shape: cubical, squamous, or columnar. Cells arranged in a simple layer or many layers (stratified).	Restricted to the basement membrane, which underlies the bottom layer of cells.	<ul style="list-style-type: none"> <li>- Classified according to cell shape and number of layers.</li> <li>- Glandular epithelium produces/secretes chemicals.</li> </ul>
<b>Connective</b>	Binding between tissues, support	Sparse population of cells.	Abundant intercellular matrix with various types and concentrations of fibres (collagenous, reticular, elastic).	Types: fibrous connective, loose connective, cartilage, bone, blood, adipose.
<b>Muscle</b>	Movement	Bundles of long cells- muscle fibres.	Surrounding each muscle fibre. Not abundant.	<ul style="list-style-type: none"> <li>- Most abundant in a typical animal. Skeletal (voluntary), cardiac &amp; smooth (involuntary).</li> <li>- Actin &amp; myosin filaments → stripes in skeletal &amp; cardiac muscles</li> </ul>
<b>Nervous</b>	Communication network	<ul style="list-style-type: none"> <li>- Neurons: axon (body) &amp; dendrites (extensions)</li> <li>- To conduct nerve signals.</li> <li>- Support cells (glial cells).</li> </ul>	Not abundant. Most of the support is done by the glial cells.	<ul style="list-style-type: none"> <li>- Forms CNS &amp; PNS</li> <li>- Responsible for receiving &amp; transmitting stimuli.</li> </ul>

