

Type	Structure	cells	Site	Growth
<i>Cartilage</i>				
Hyaline cartilage	<ol style="list-style-type: none"> <li>1) Perichondrium of 2 layers (vascular)</li> <li>2) Matrix has collagen type II (basophilic)</li> <li>3) Chondrocytes can be single or in groups (cell nests)</li> </ol>	<ol style="list-style-type: none"> <li>1) Chondroblast in perichondrium</li> <li>2) Chondrocytes in matrix</li> </ol>	<ol style="list-style-type: none"> <li>1) Foetal skeleton</li> <li>2) Costal cartilage</li> <li>3) Bone articular surface</li> <li>4) Nose</li> <li>5) Trachea &amp; bronchi</li> </ol>	<p>Appositional growth :</p> <ul style="list-style-type: none"> <li>• Increase in width</li> <li>• By chondroblast in the inner chondrogenic layer</li> </ul> <p>Interstitial growth :</p> <ul style="list-style-type: none"> <li>• Increase in length</li> <li>• By action of chondrocytes</li> </ul>
Elastic cartilage	Similar to Hyaline + Elastic fibers		<ol style="list-style-type: none"> <li>1) External ear</li> <li>2) epiglottis</li> </ol>	
Fibrocartilage	<ol style="list-style-type: none"> <li>1) No perichondrium</li> <li>2) Collagen type I</li> </ol>		<ol style="list-style-type: none"> <li>1) Intervertebral disks.</li> </ol>	
<i>Bone</i>				
Compact "cortical"	<ol style="list-style-type: none"> <li>1) Periosteum</li> <li>2) Endosteum</li> <li>3) Bone lamellae <ul style="list-style-type: none"> <li>• Haversian systems (osteons)</li> <li>• 3 parts of lamellae: <ul style="list-style-type: none"> <li>External Circumferential Lamellae.</li> <li>Internal Circumferential Lamellae.</li> <li>Interstitial Lamellae</li> </ul> </li> </ul> </li> </ol>	<p>Bone forming cells</p> <ol style="list-style-type: none"> <li>1) Osteogenic cells : Gives rise to osteoblast</li> <li>1) Osteoblasts Secrete matrix and Ca</li> <li>2) Osteocytes Maintain matrix</li> </ol>	found in the diaphysis of long bones .	<p>Appositional growth :</p> <ul style="list-style-type: none"> <li>• Increase in width</li> <li>• By activity of osteoblasts</li> </ul> <p>Growth in length :</p> <ul style="list-style-type: none"> <li>• Increase in length</li> <li>• By activity of epiphyseal plate of cartilage</li> </ul>
Spongy	<ol style="list-style-type: none"> <li>1) Periosteum</li> <li>2) Endosteum</li> <li>3) Irregular bone trabeculae</li> <li>4) Bone marrow spaces</li> </ol> <p>No haversian system</p>	<p>Bone destructive cell</p> <ol style="list-style-type: none"> <li>1) Osteoclast Bone resorption</li> </ol>	found flat bones & epiphysis of long bones.	

Disclaimer: this table has been done upon one of our dear calssmate's request . It is not related to the doctors nor are we saying that the information included are by any means extra important .