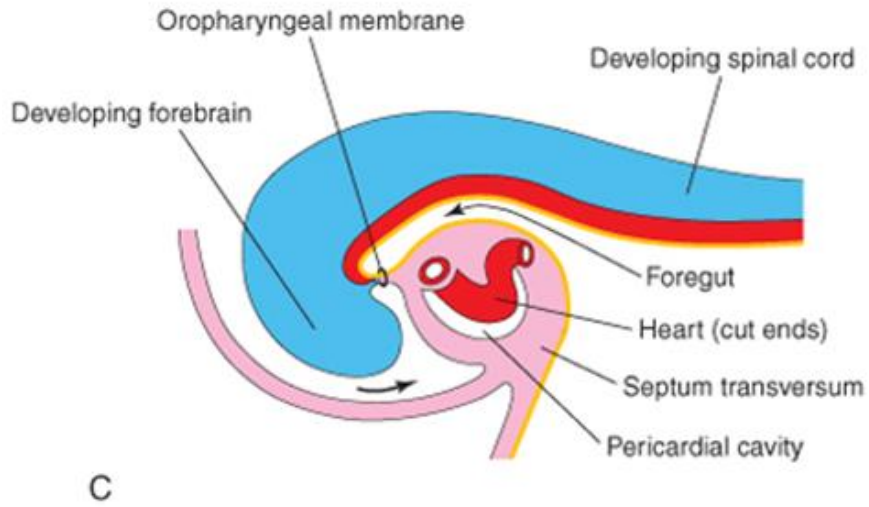
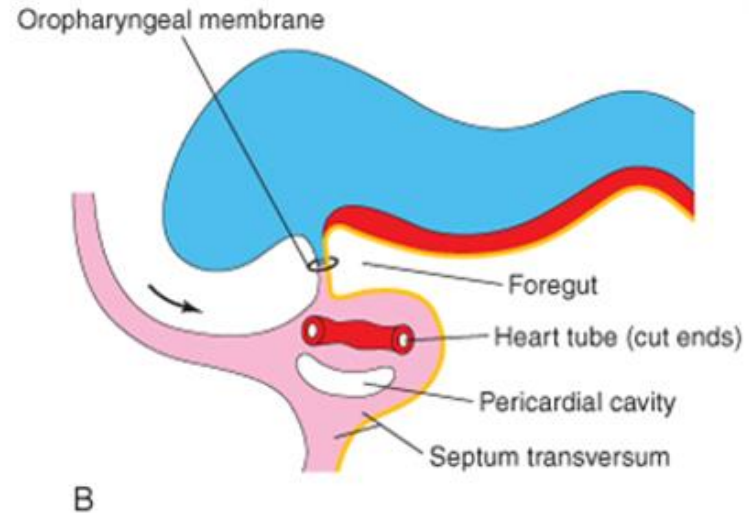
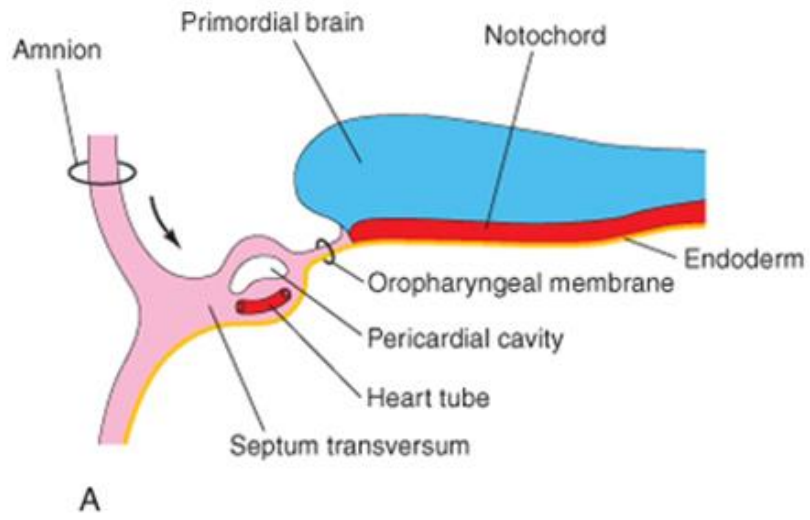
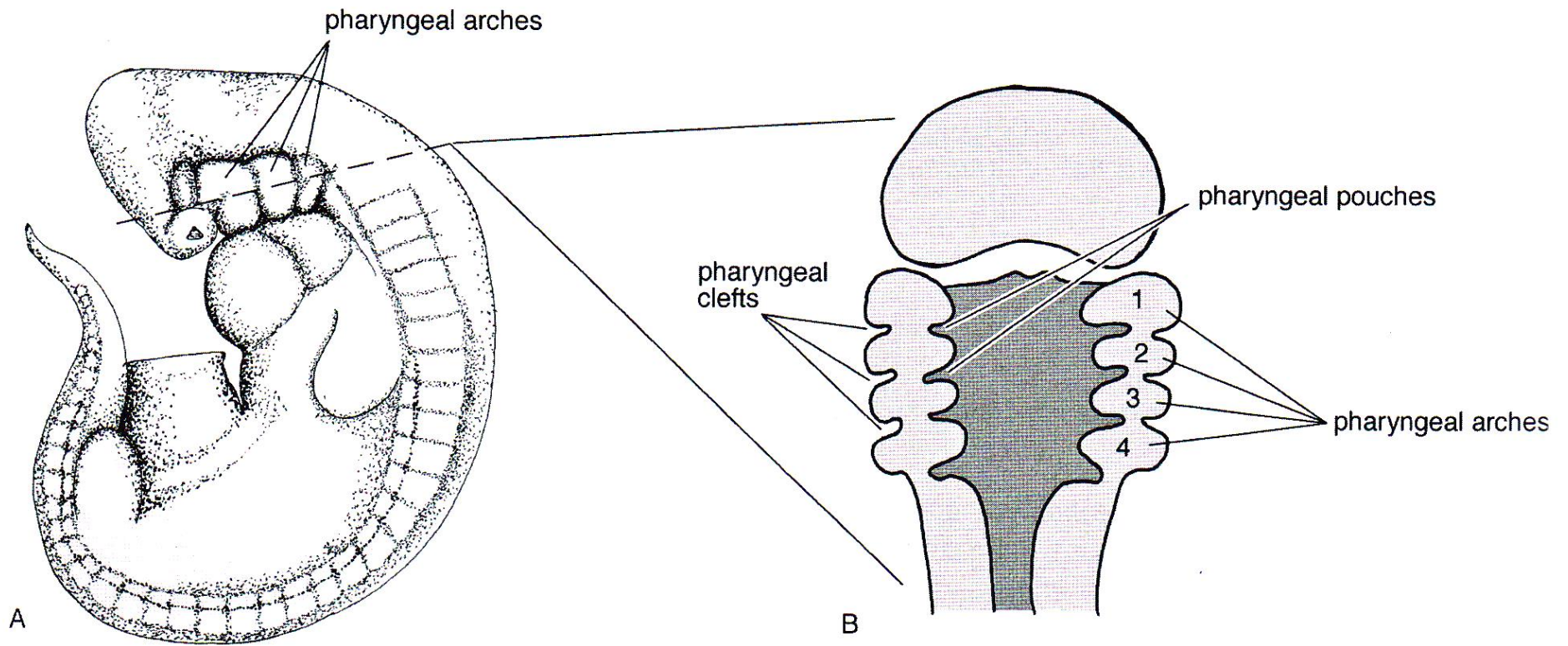
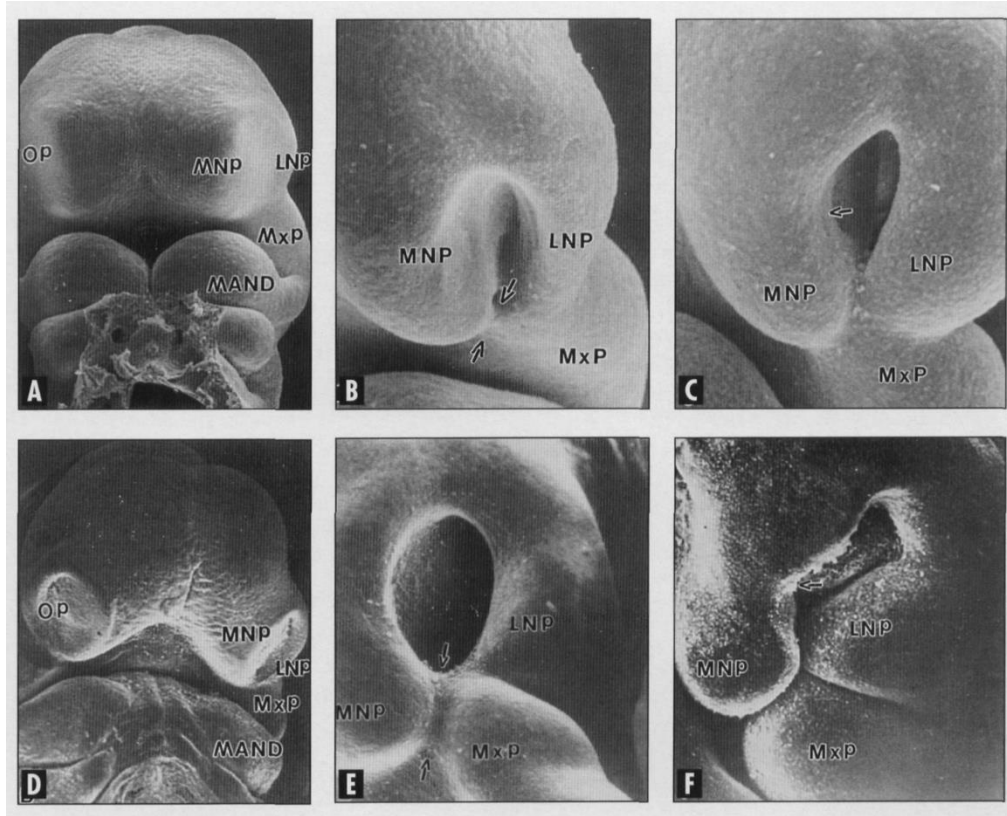


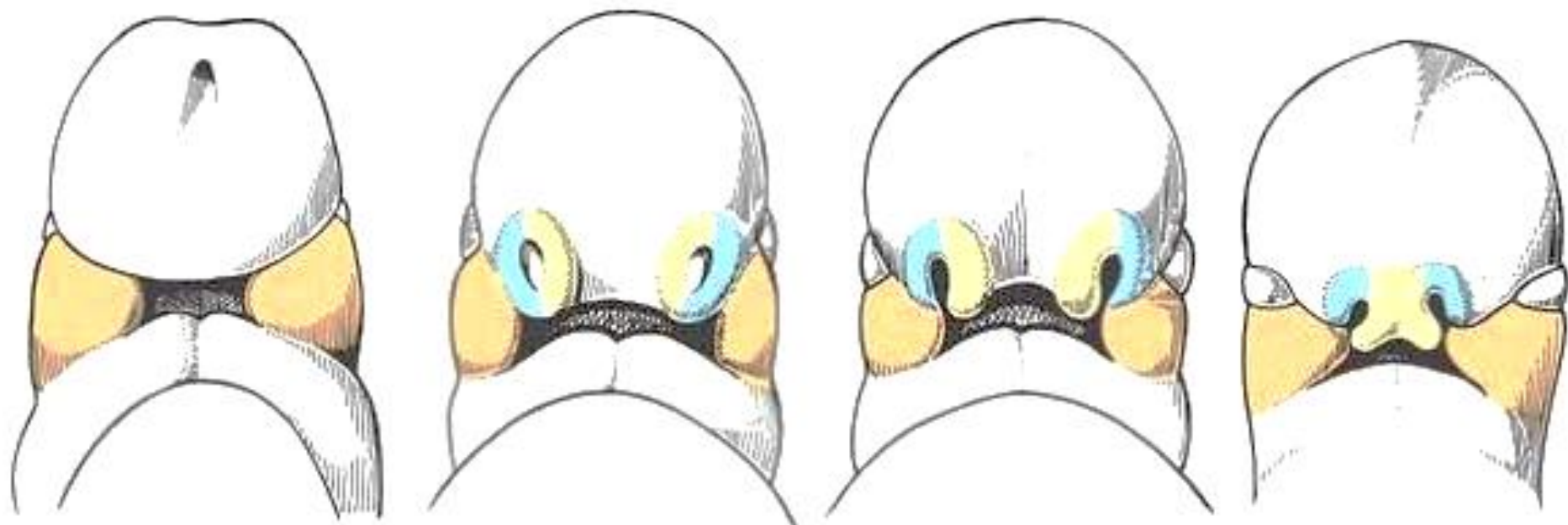
Development of craniofacial structures

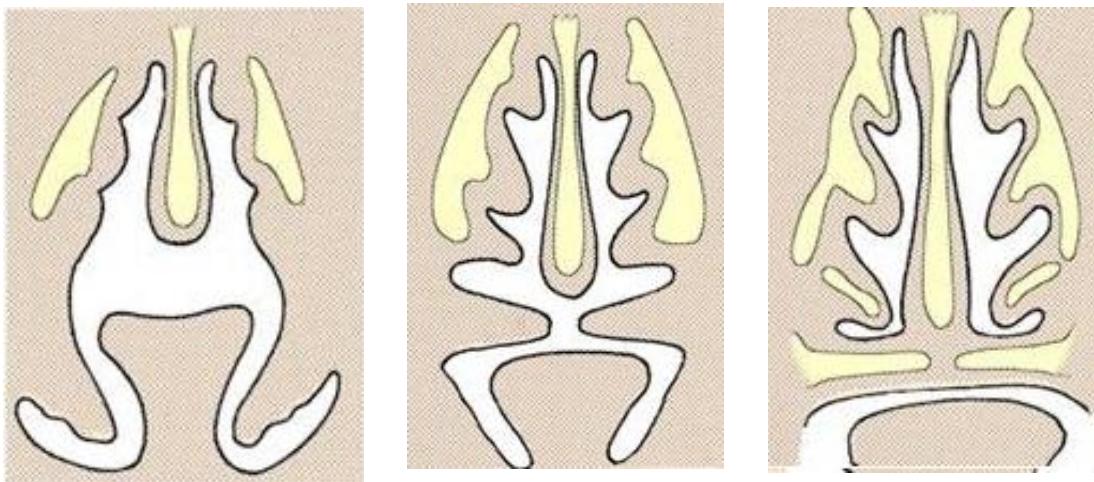
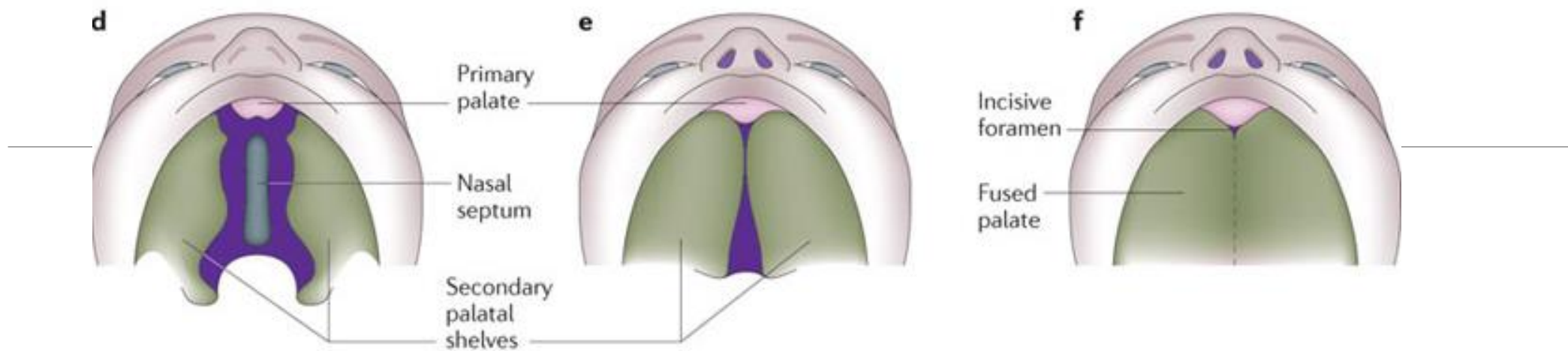
MARCELA BUCHTOVÁ



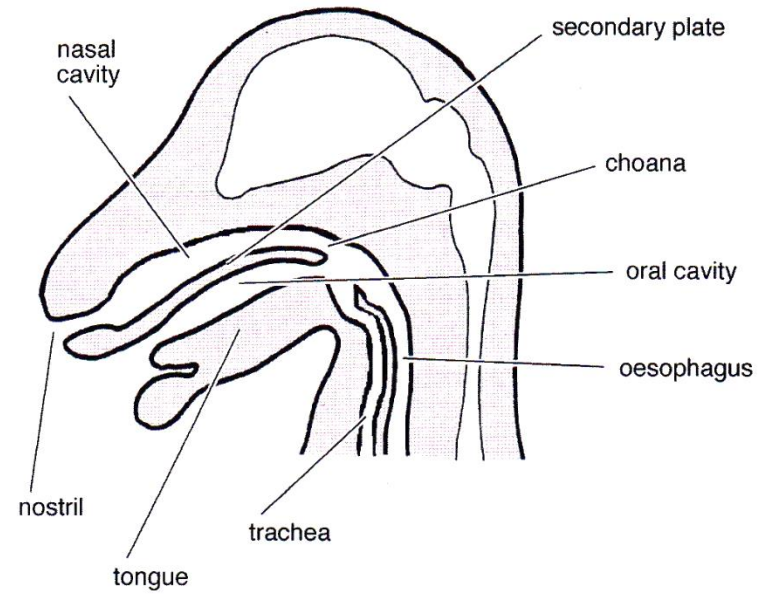
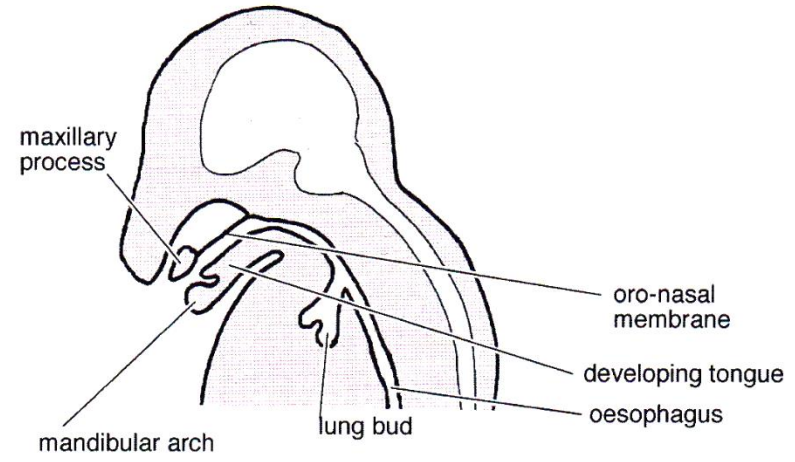
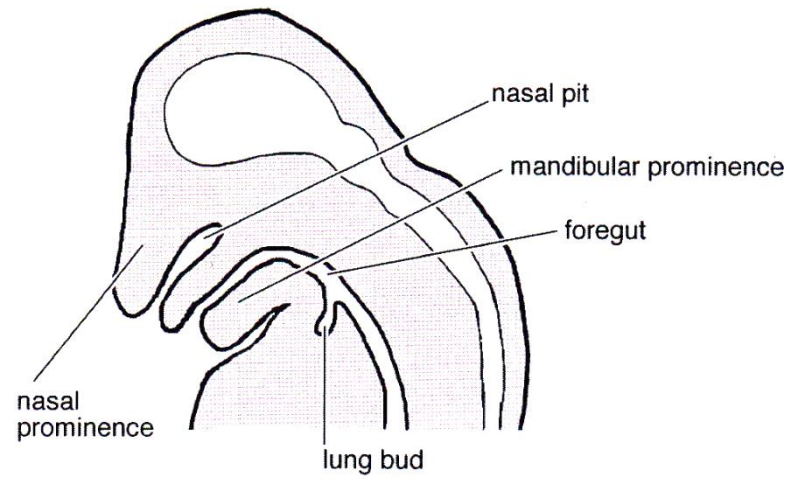
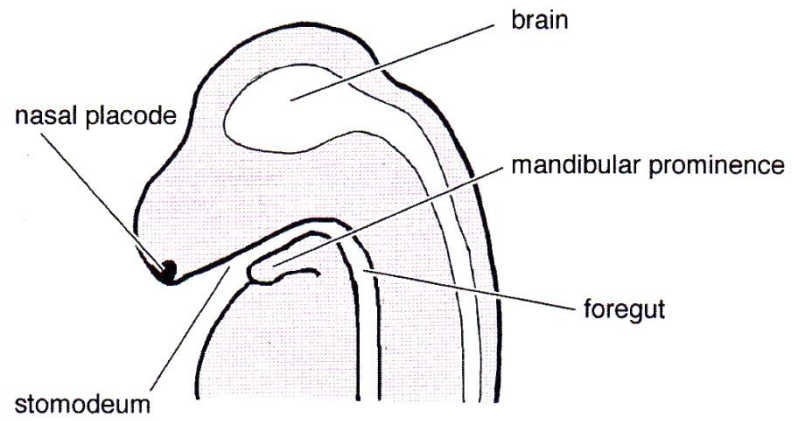


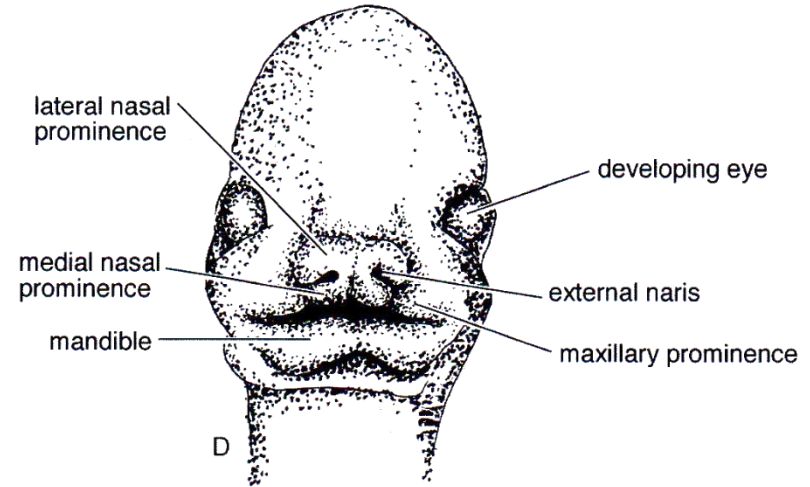
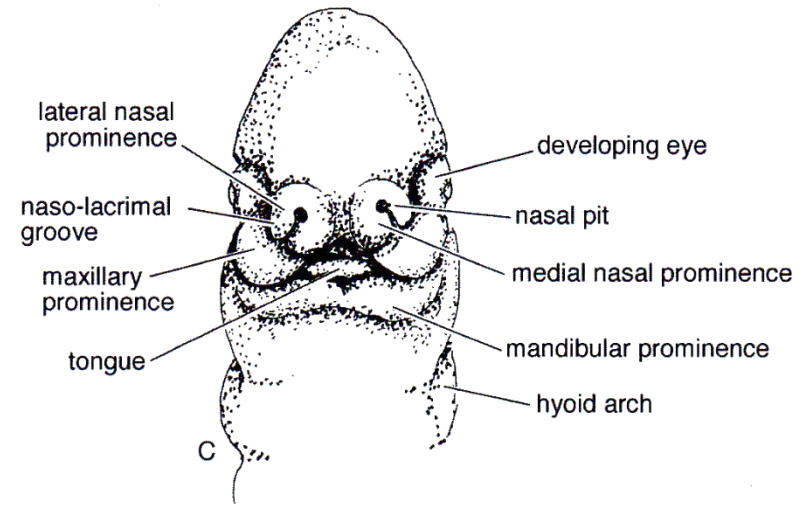
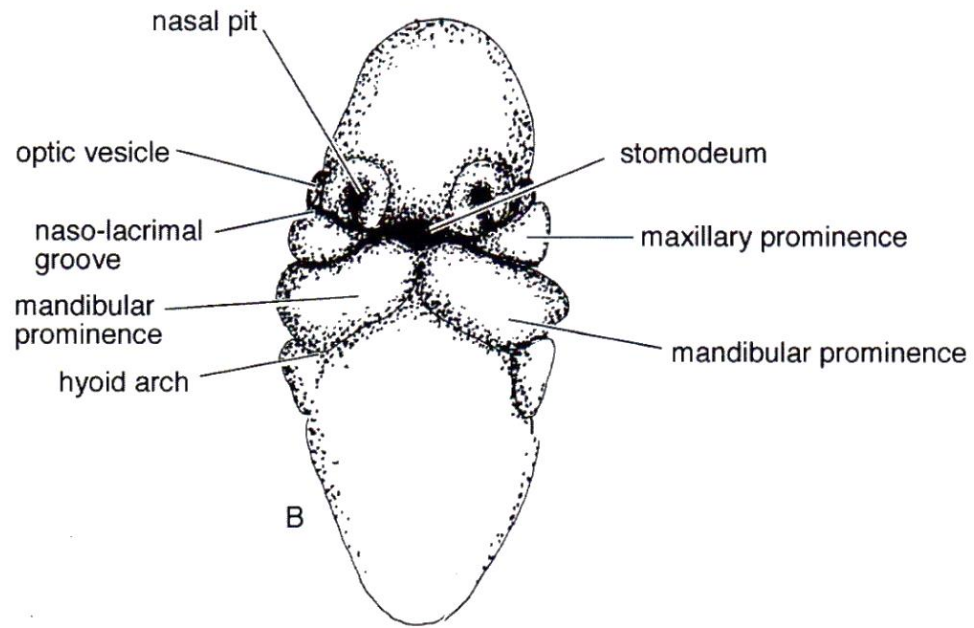
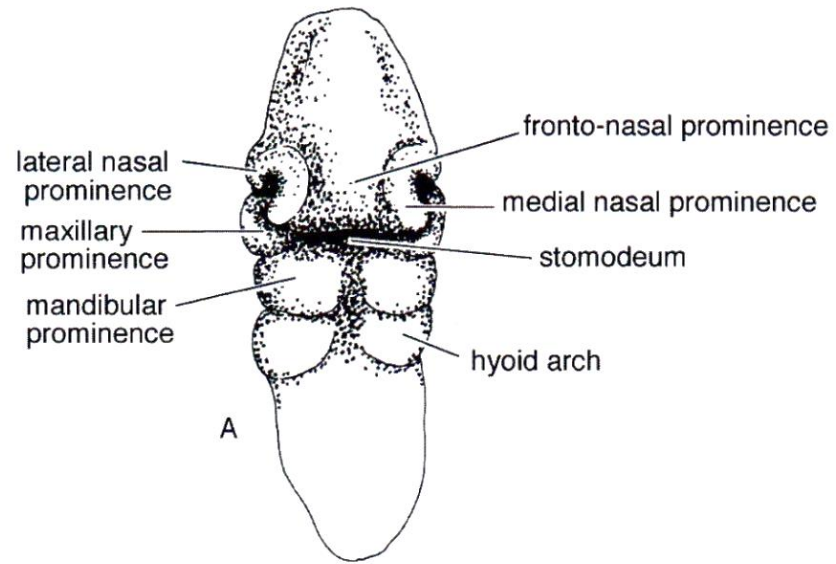




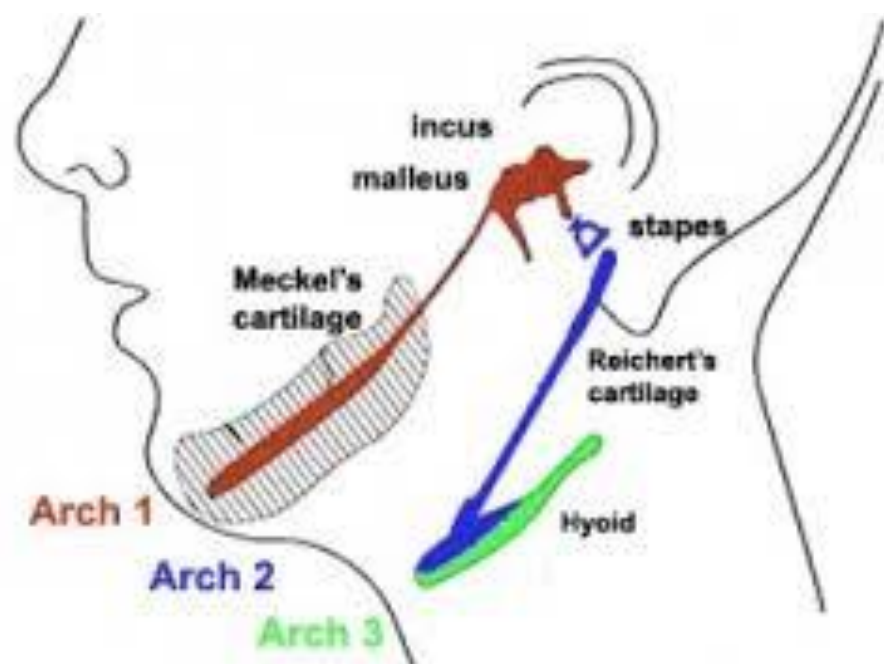


Dixon et al., 2011)

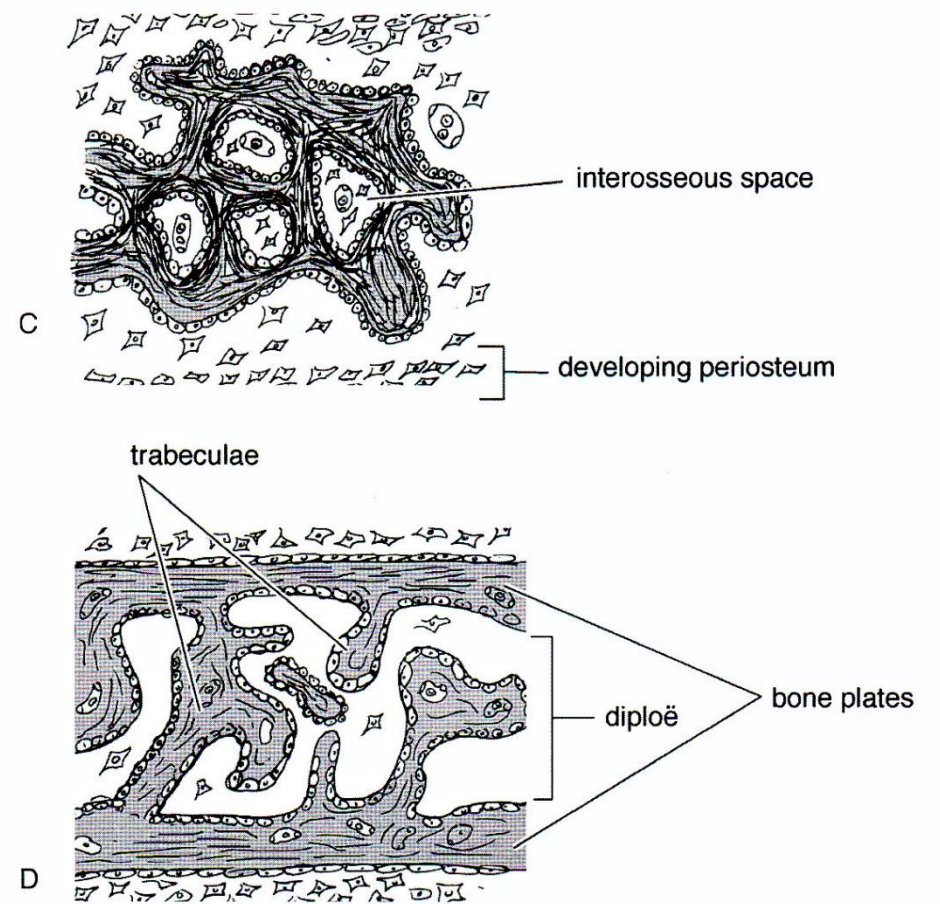
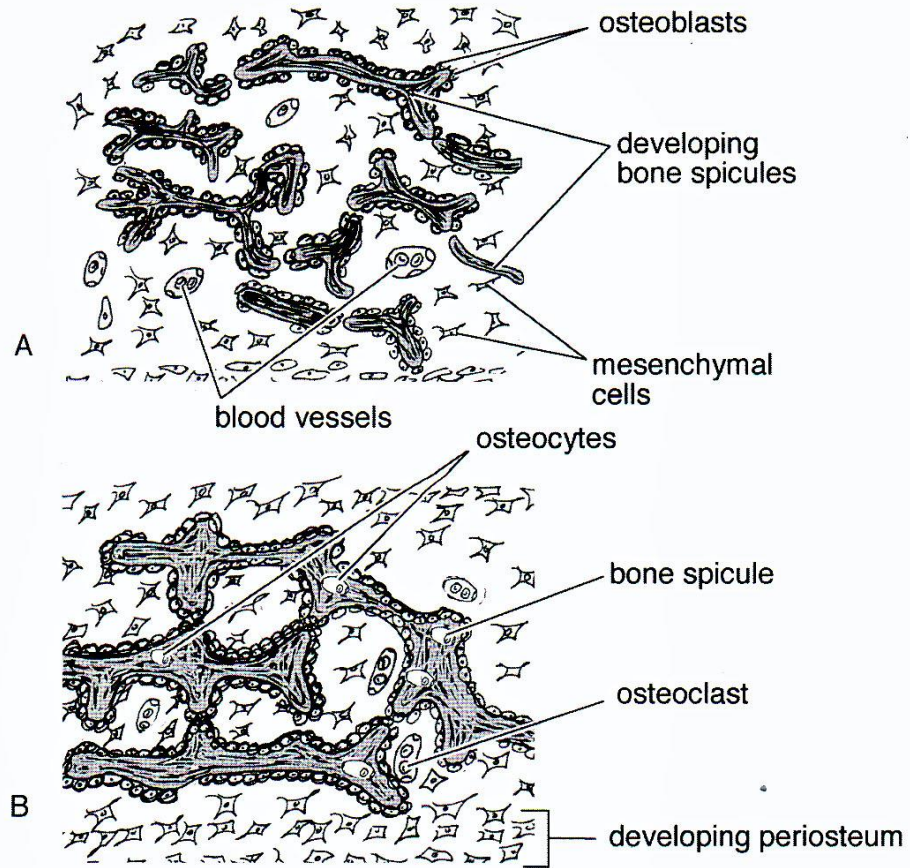


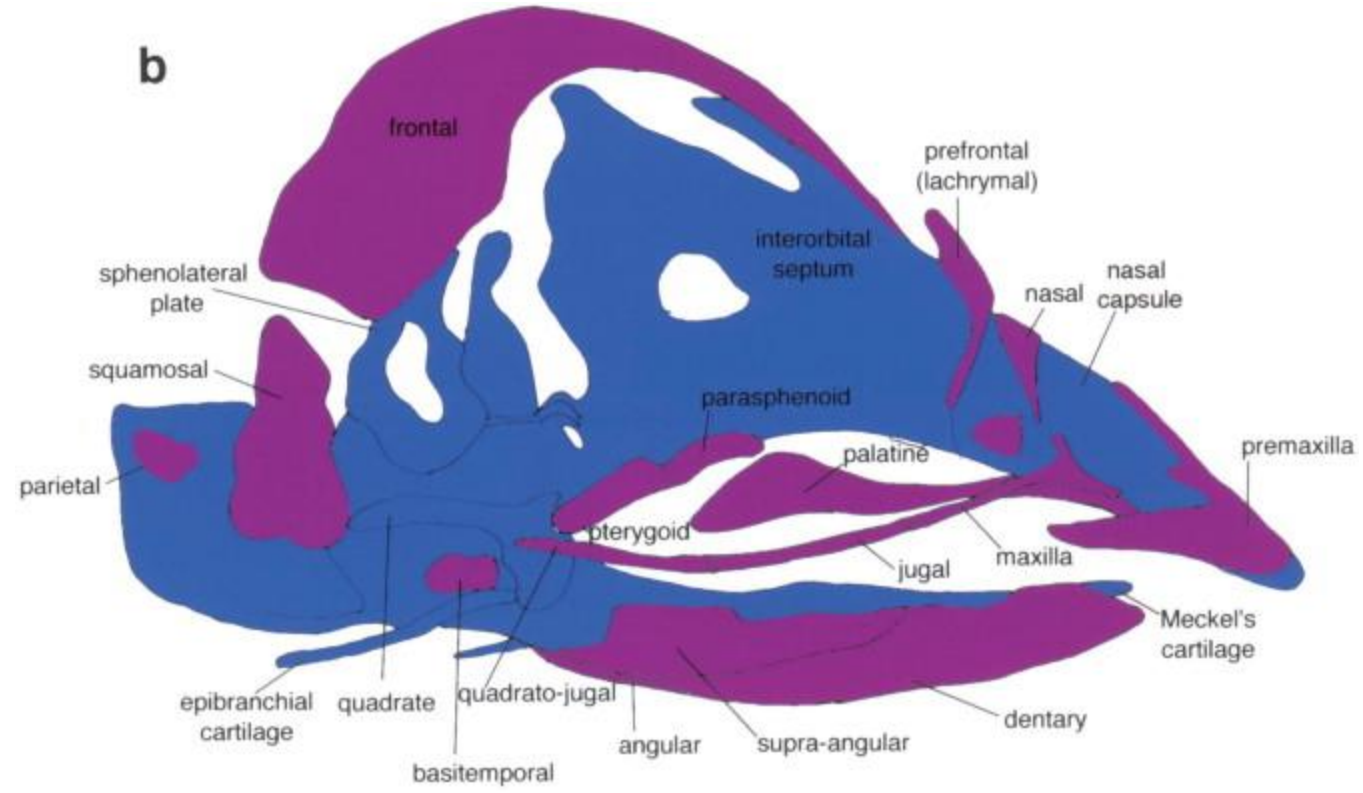


Pharyngeal arch	Arch derivatives					
	Muscles	Bone and cartilage	Other connective tissues	Pouch derivatives	Cleft derivatives	Cranial nerve
First (mandibular)	Muscles of mastication, mylohyoid, rostral belly of digastricus, tensor tympani, tensor veli palatini	Mandible, maxilla, pre-maxilla, zygomatic, auricle of ear, malleus, incus	Ligament of malleus, spheno-mandibular ligament, tympanic membrane (from first pharyngeal membrane)	Auditory tube, guttural pouch	External auditory meatus	Trigeminal (V)
Second (hyoid)	Muscles of facial expression, stapedius, stylohyoid, caudal belly of digastricus	Auricle of ear, stapes, stylohyoid, ceratohyoid, part of basihyoid	Stylohyoid ligament	Palatine tonsils	None	Facial (VII)
Third	Stylopharyngeus	Part of basihyoid bone, thyrohyoid cartilage	None	Parathyroids III, stroma of thymus	None	Glossopharyngeal (IX)
Fourth and sixth	Cricothyroid, levator veli palatini, constrictors of pharynx, intrinsic muscles of larynx	Cricoid, thyroid, arytenoid, corniculate and cuneiform cartilages of larynx.	None	Parathyroids IV, stroma of thymus, ultimobranchial bodies	None	Cranial and recurrent laryngeal branches of vagus (X)

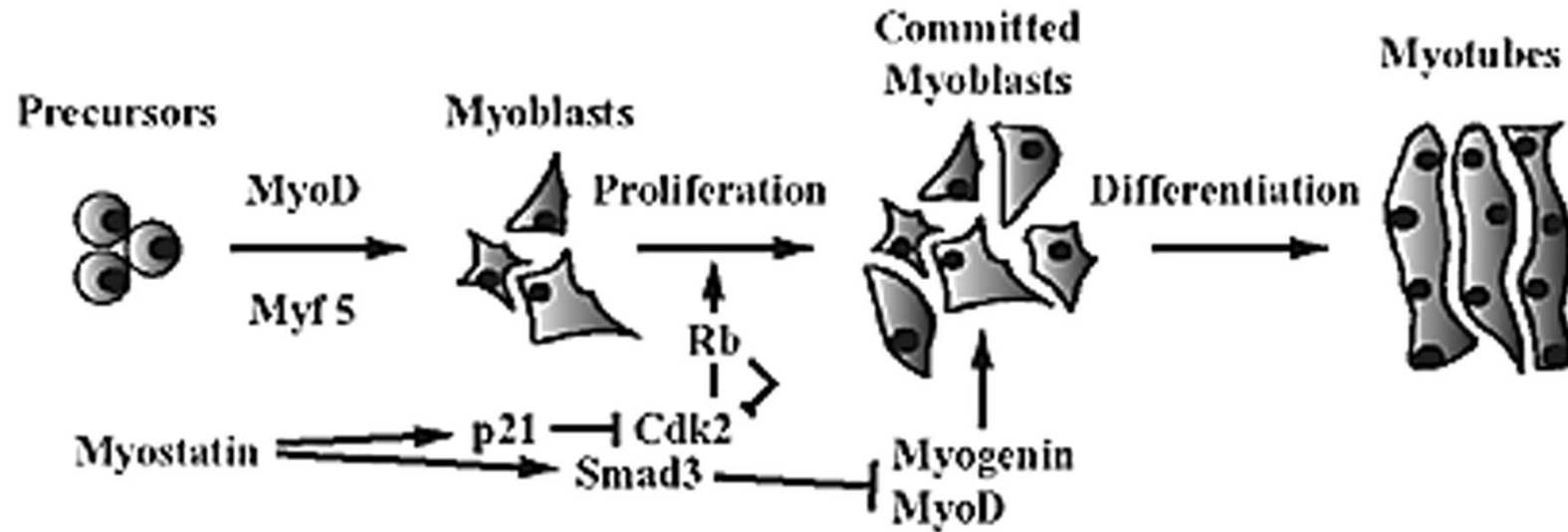


Pharyngeal Arch Structures

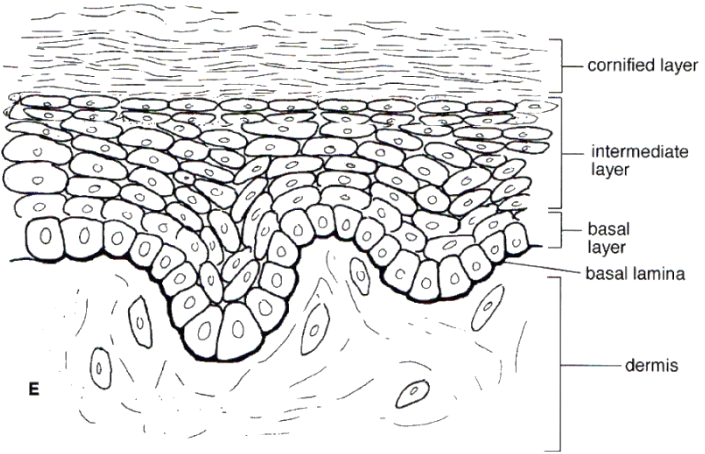
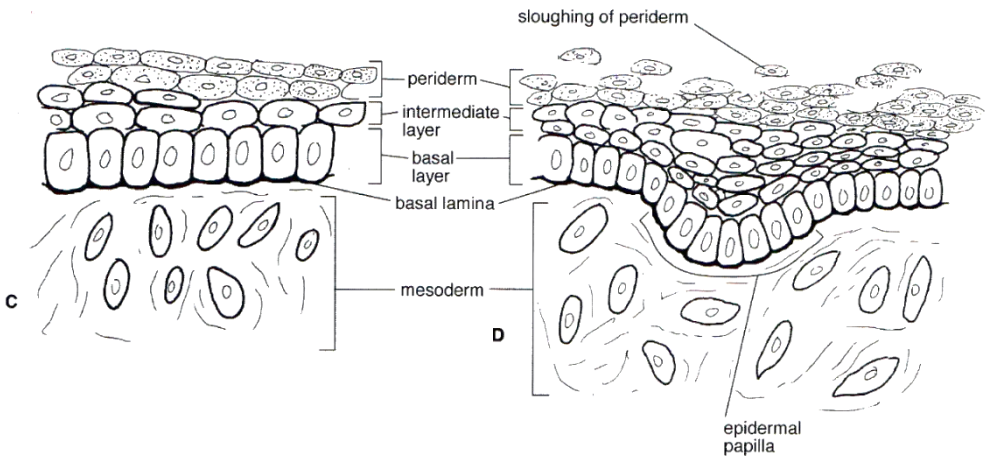
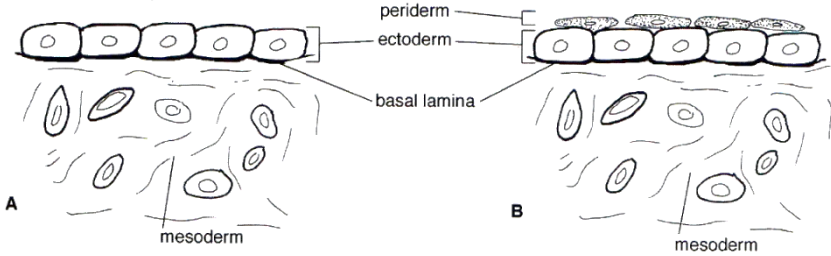


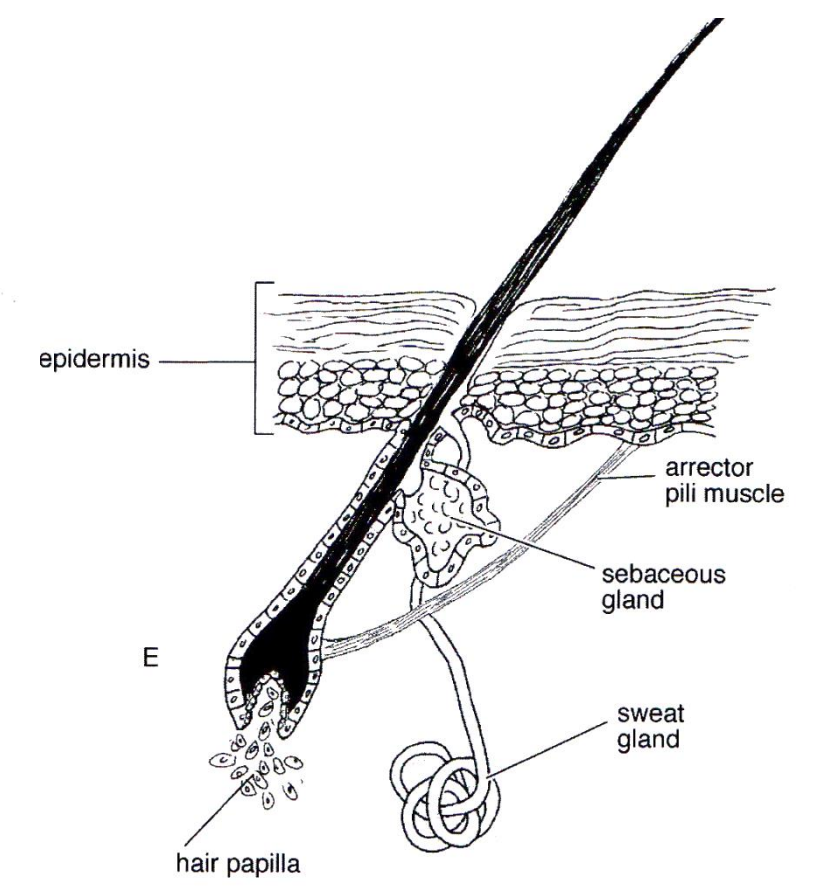
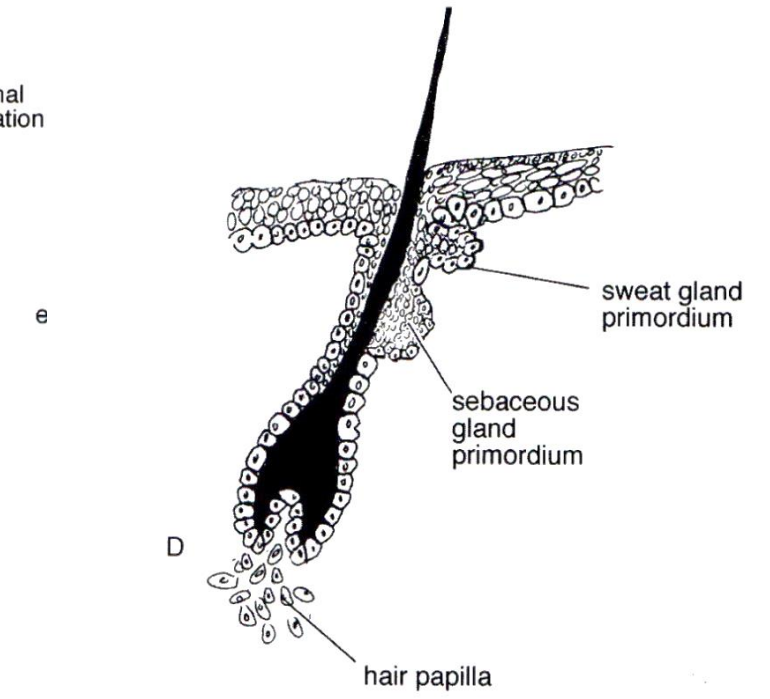
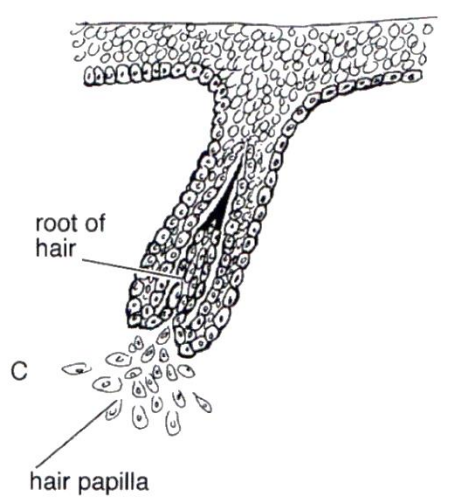
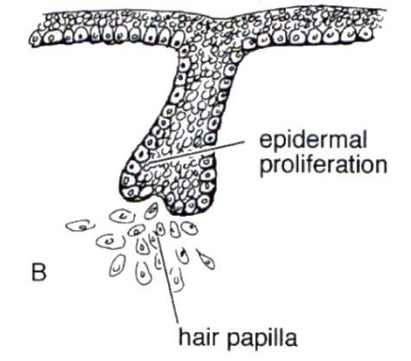
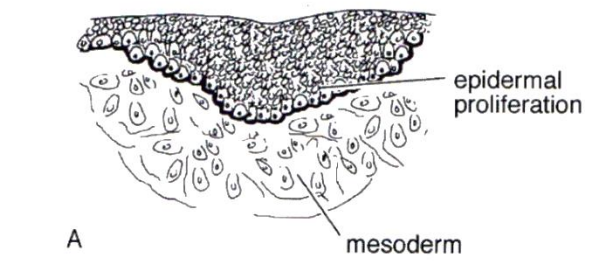


Myogenesis

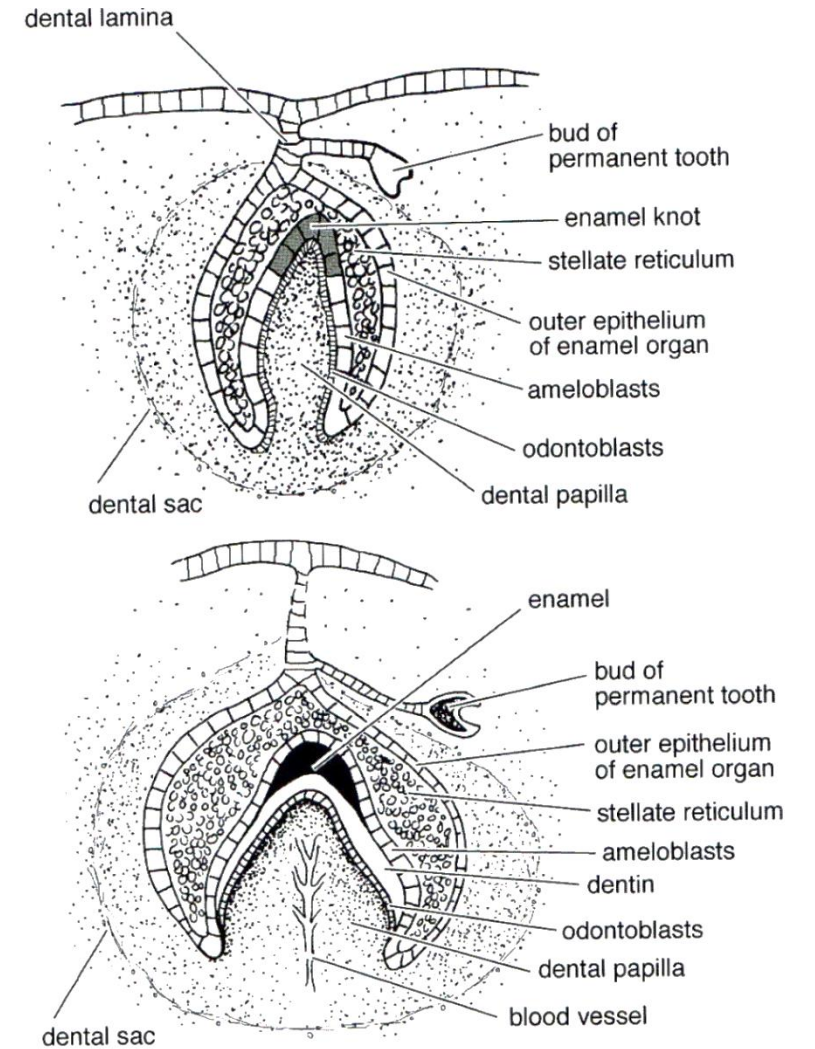
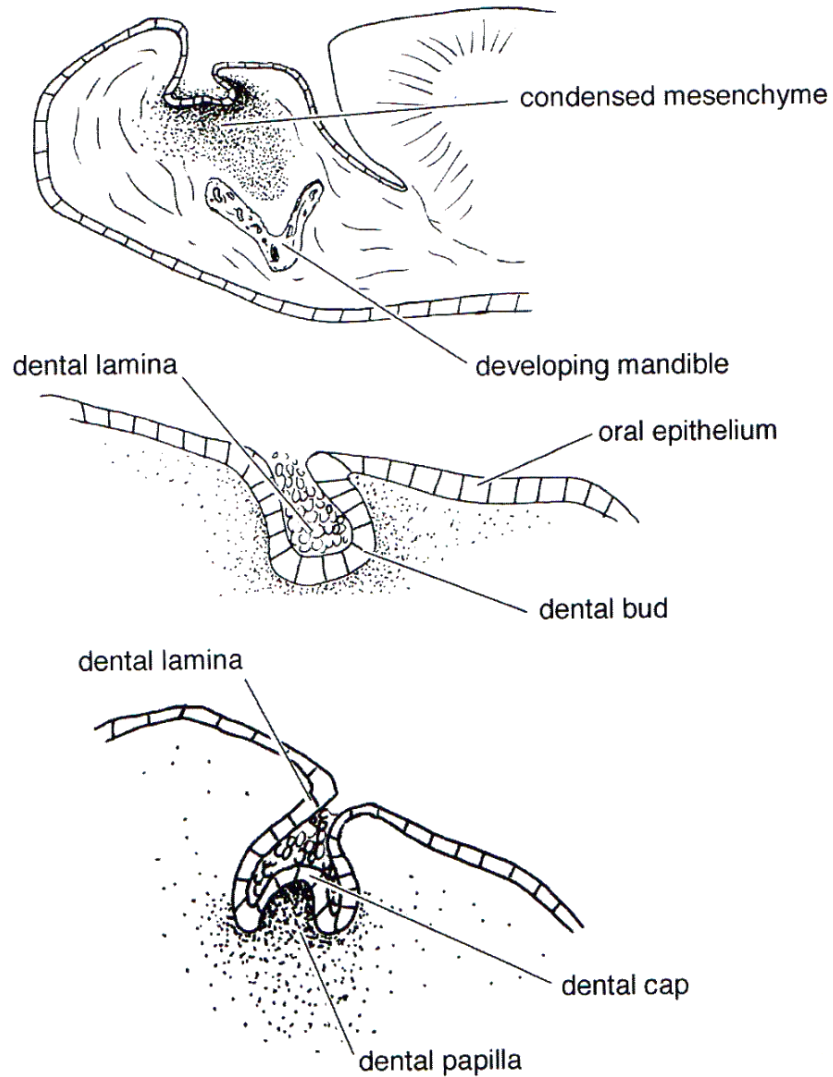


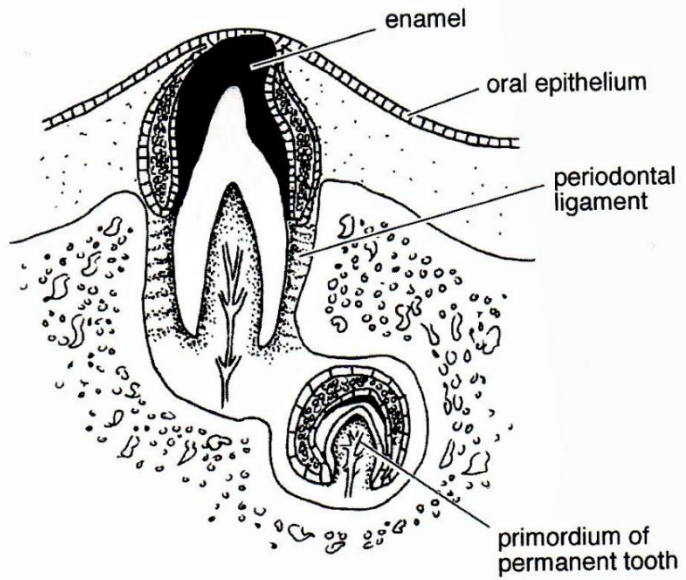
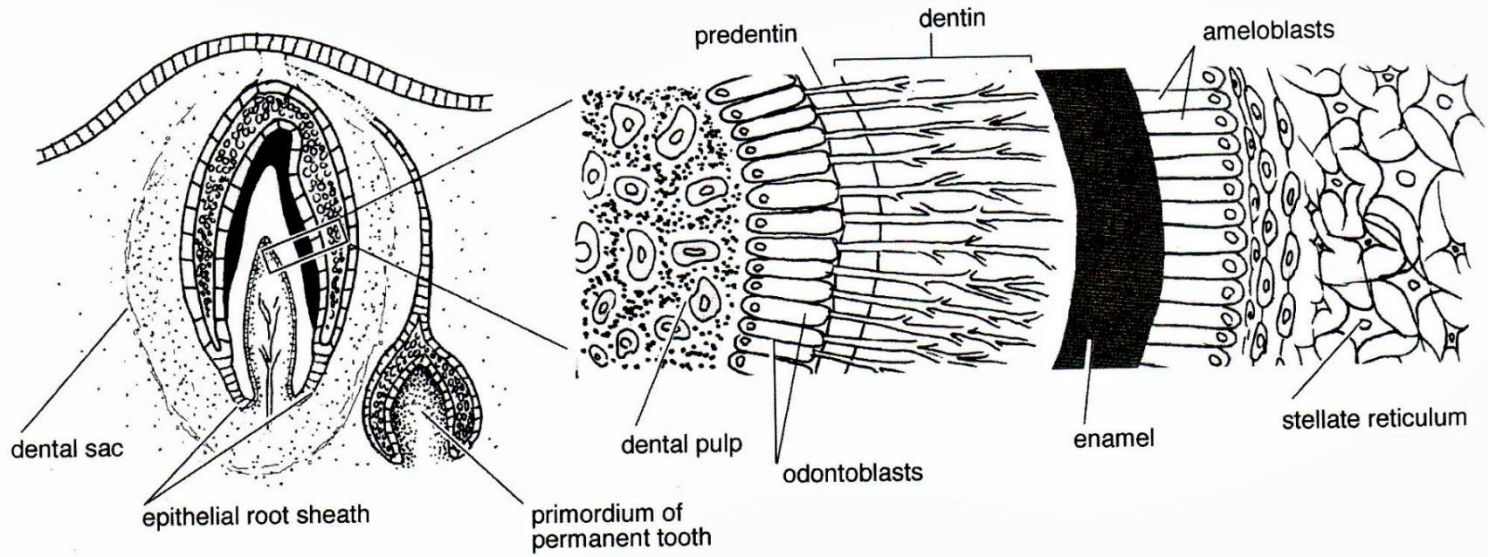
Skin development



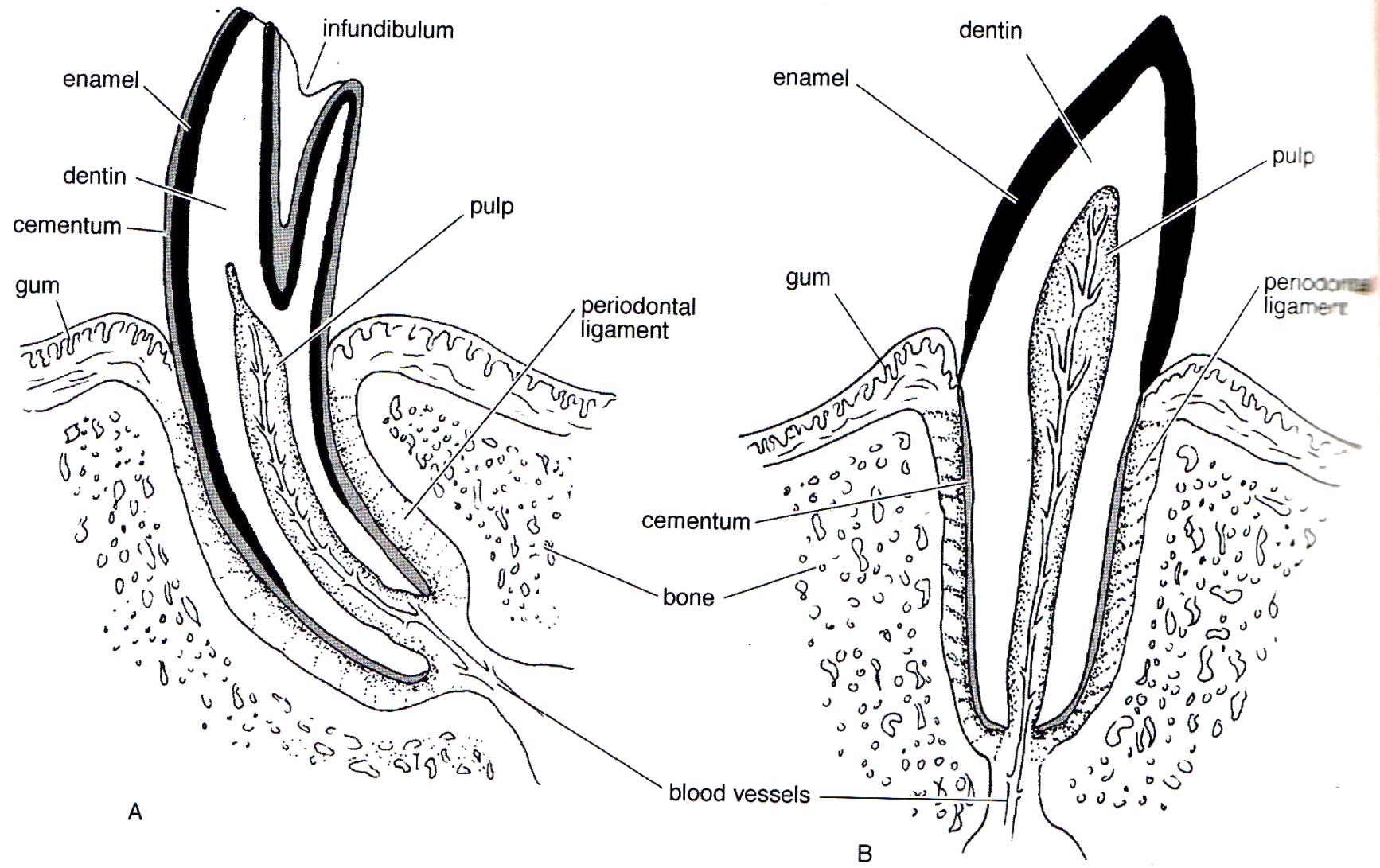


Odontogenesis





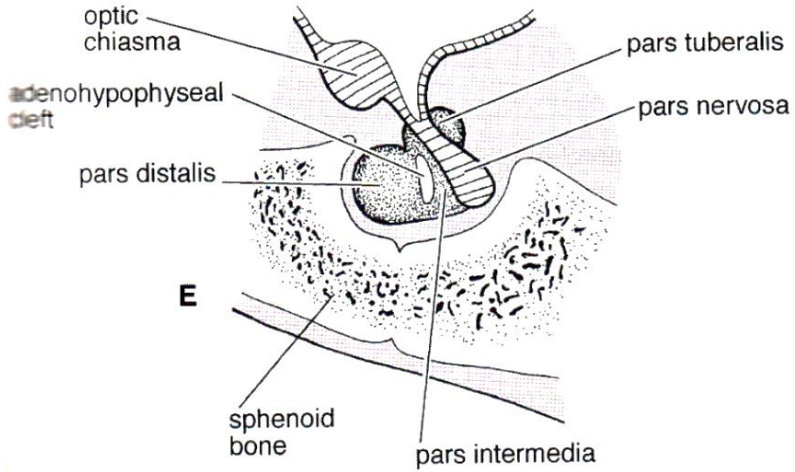
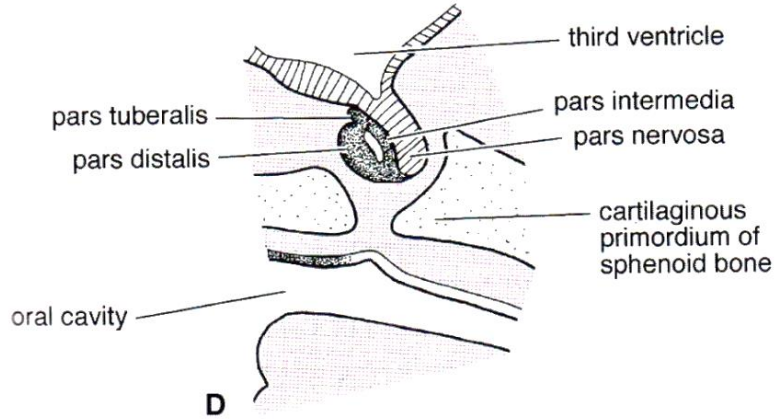
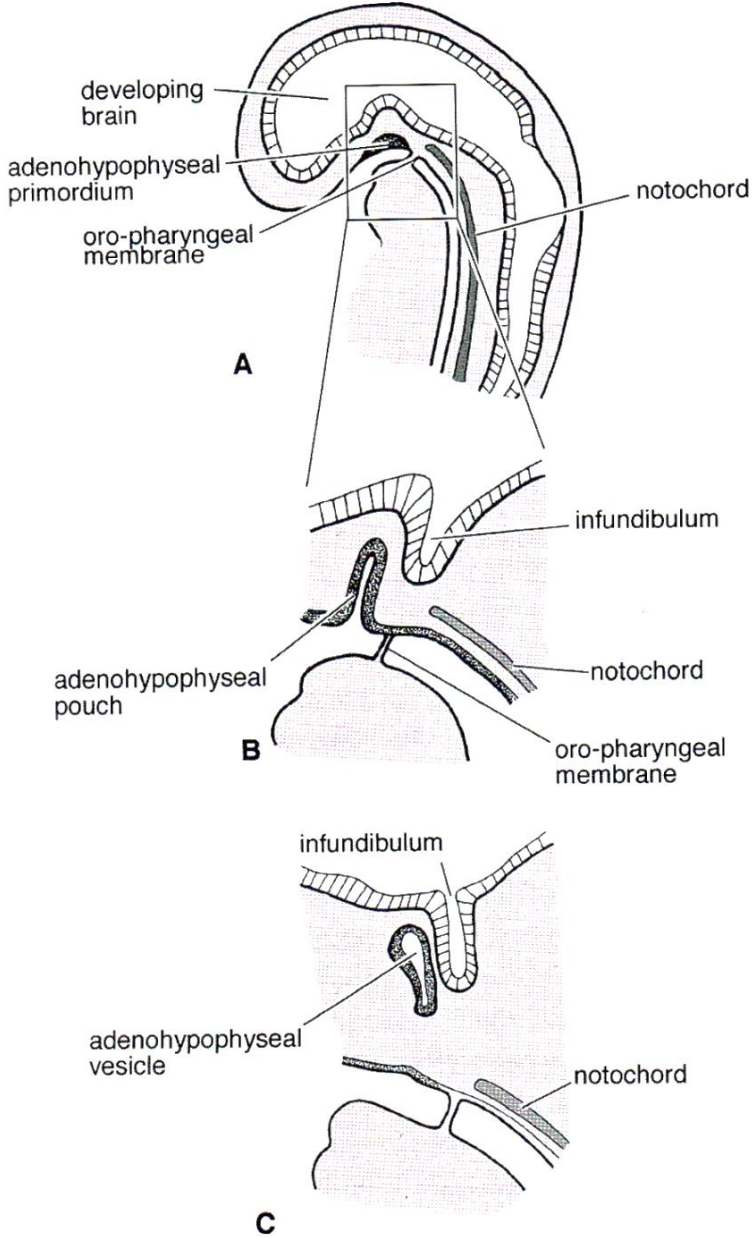
Odontogenesis



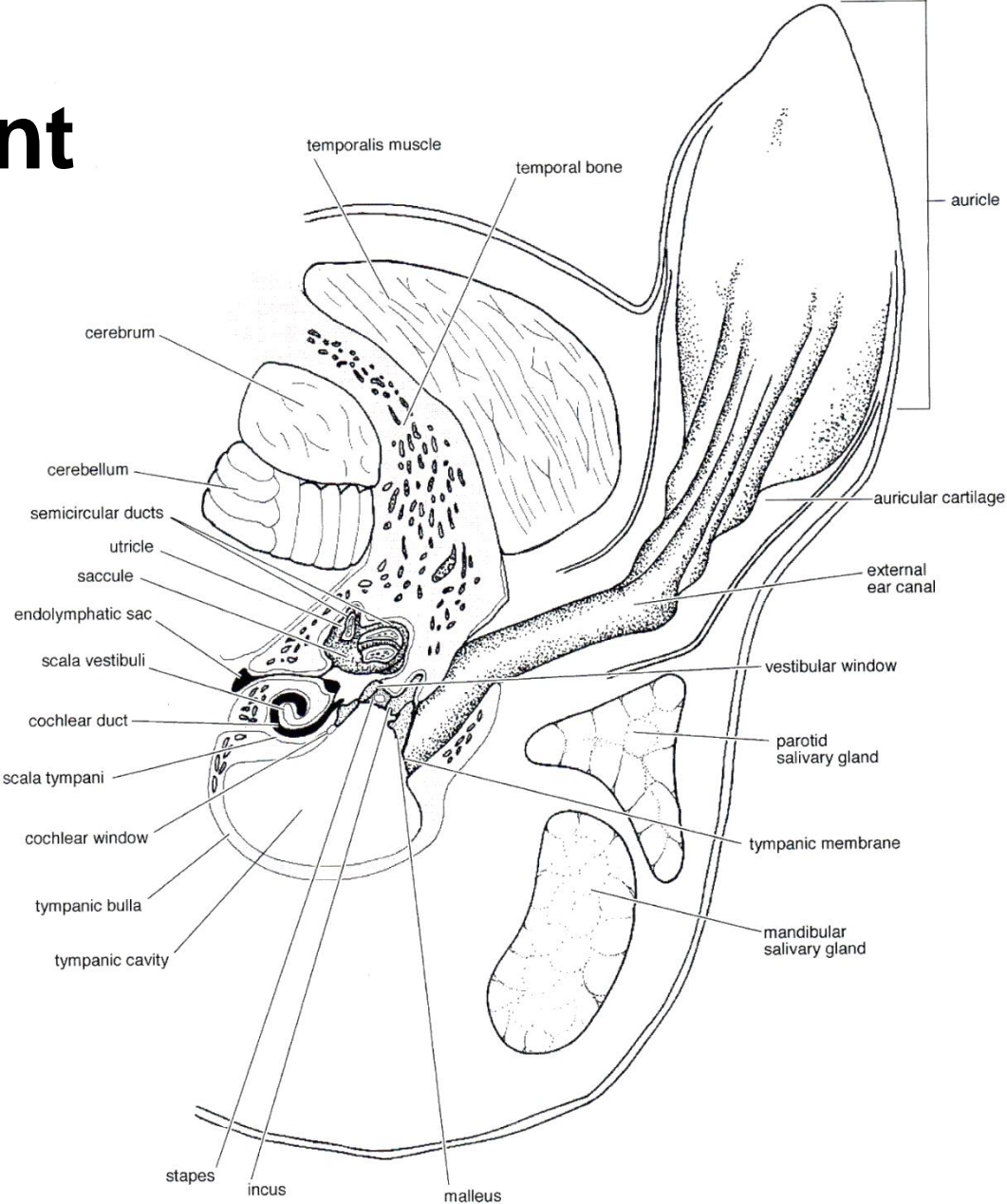
A

B

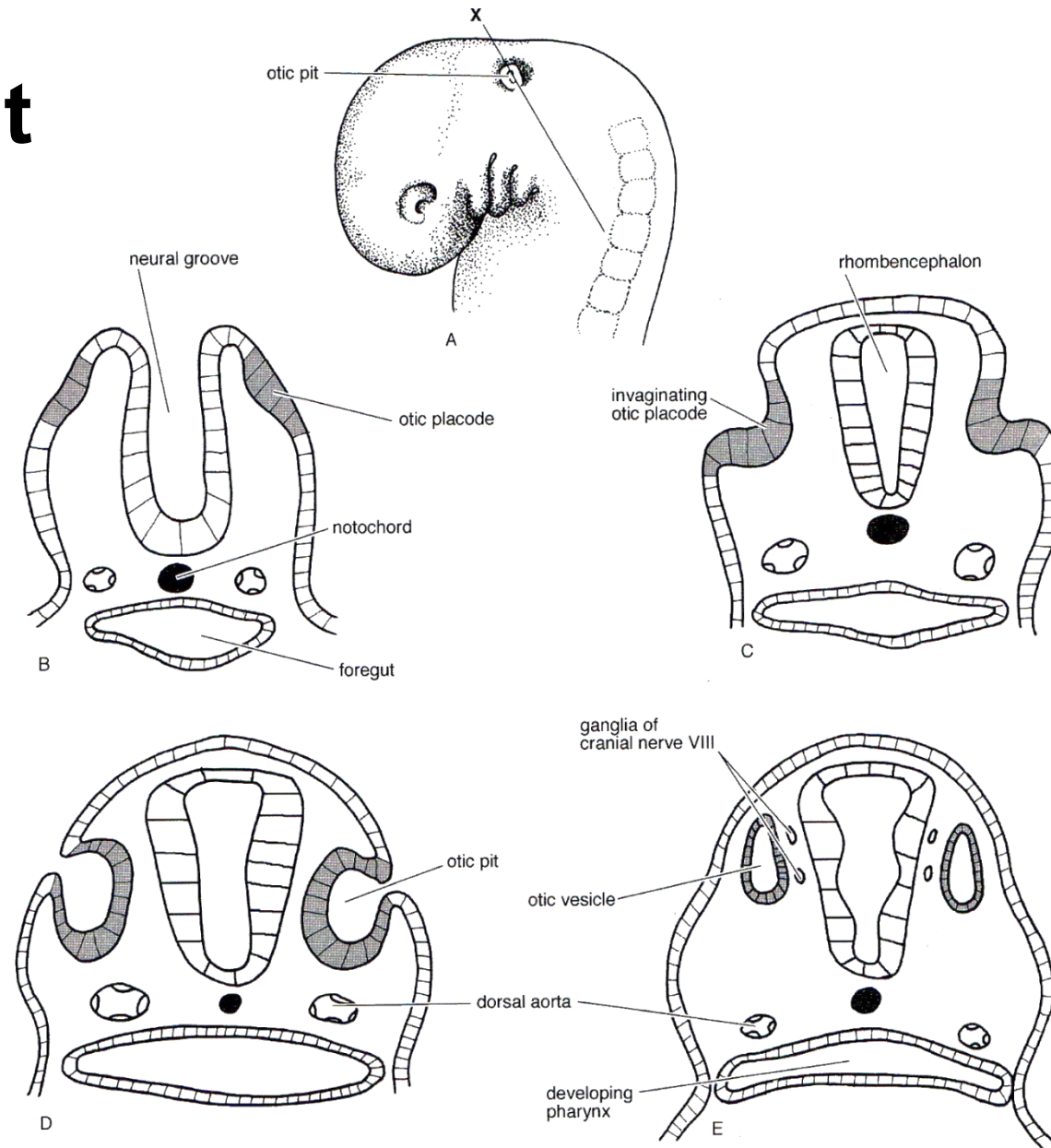
Development of pituitary gland



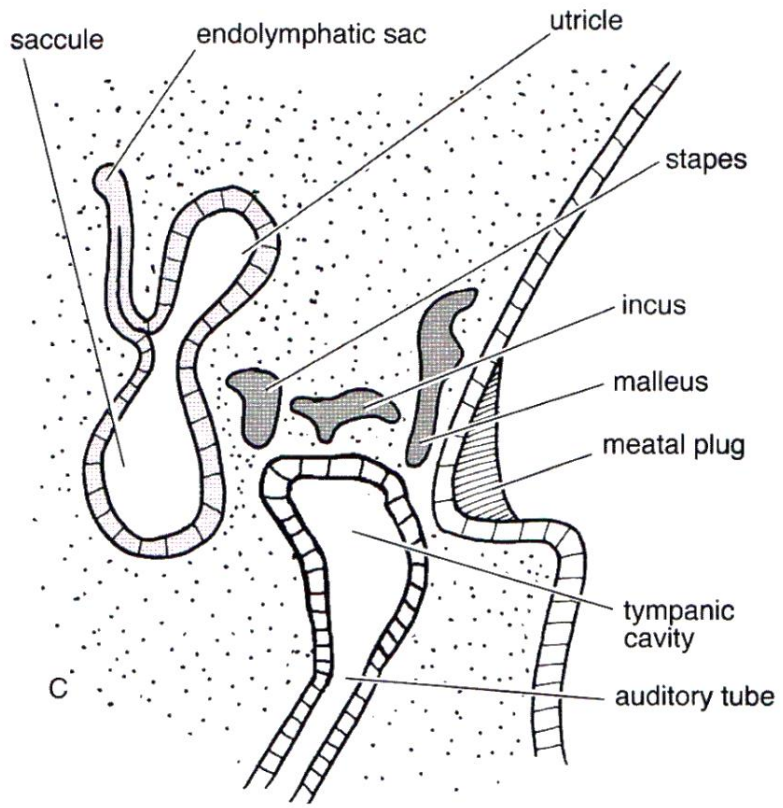
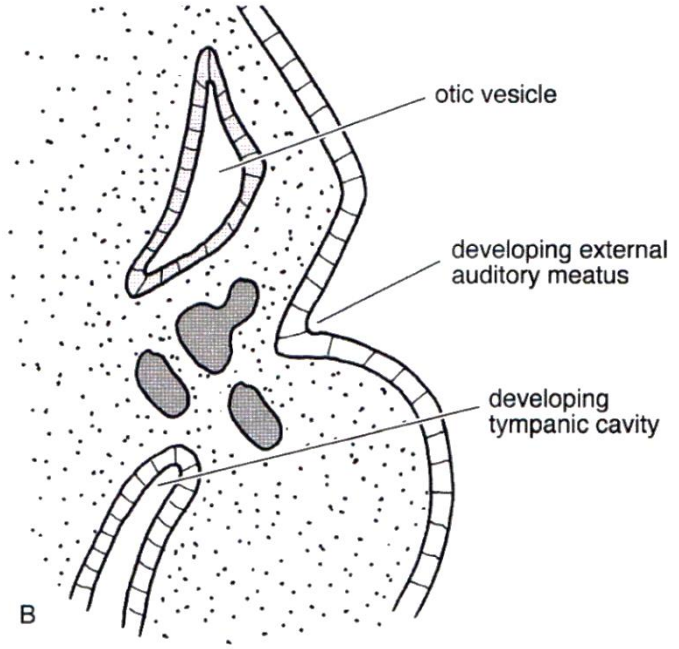
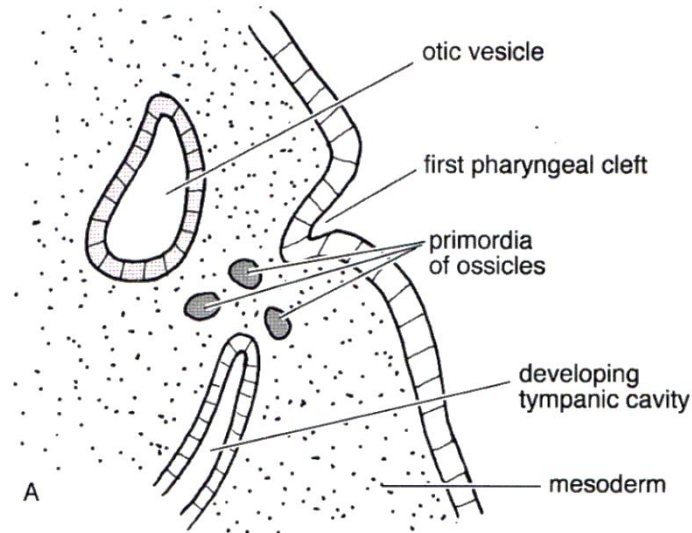
Ear development



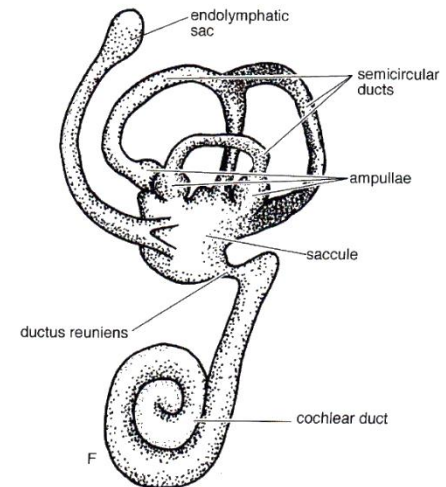
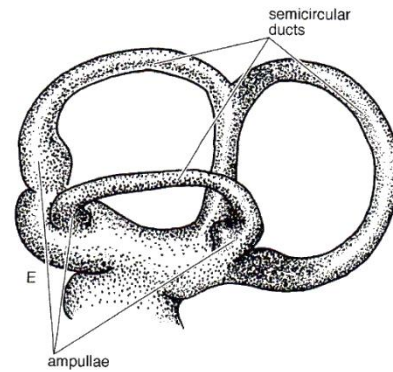
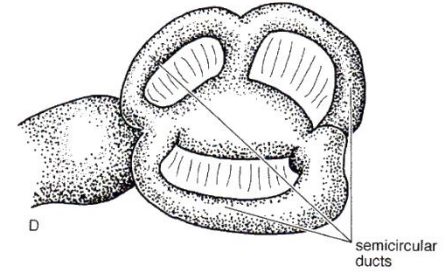
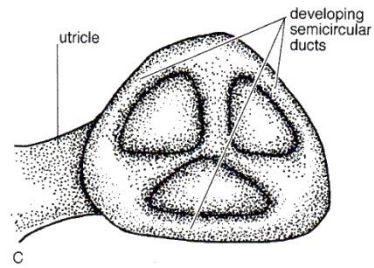
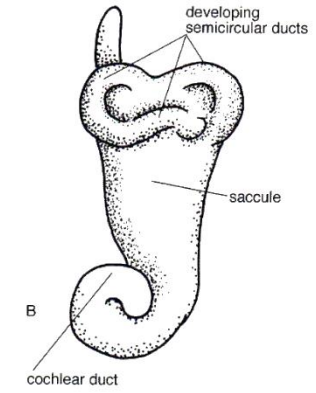
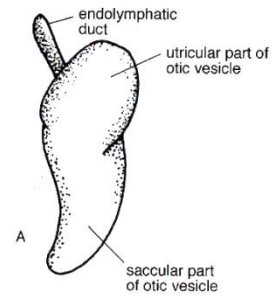
Ear development



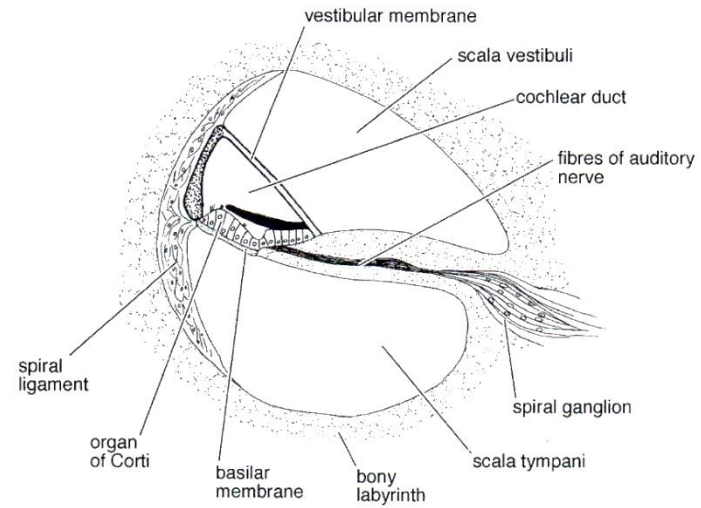
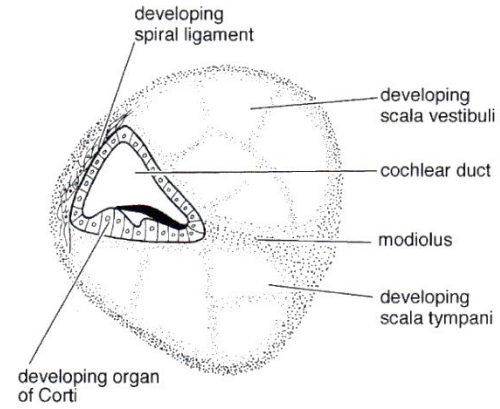
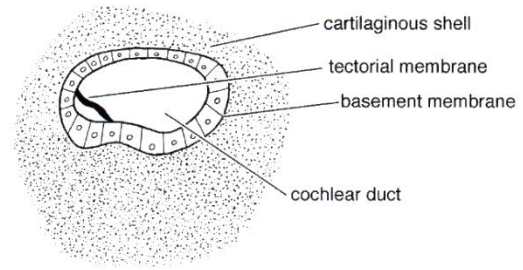
Ear development



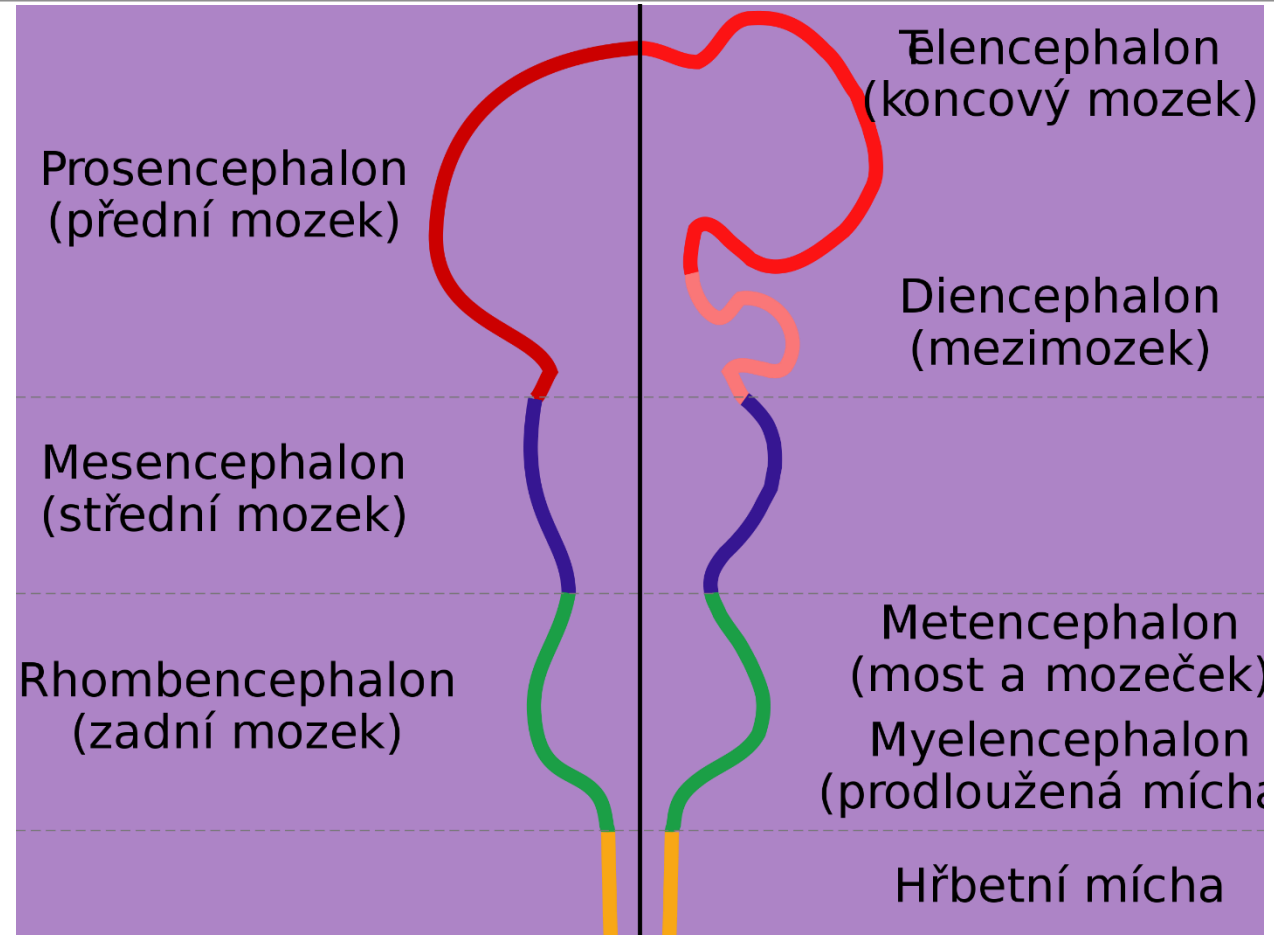
Ear development



Ear development

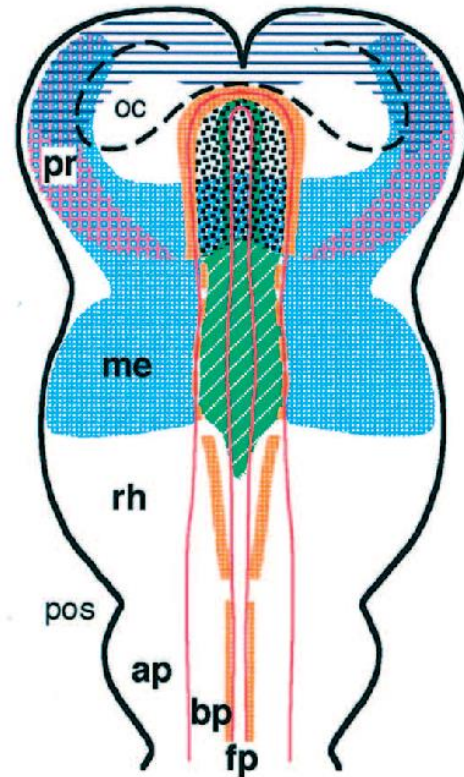


Brain development

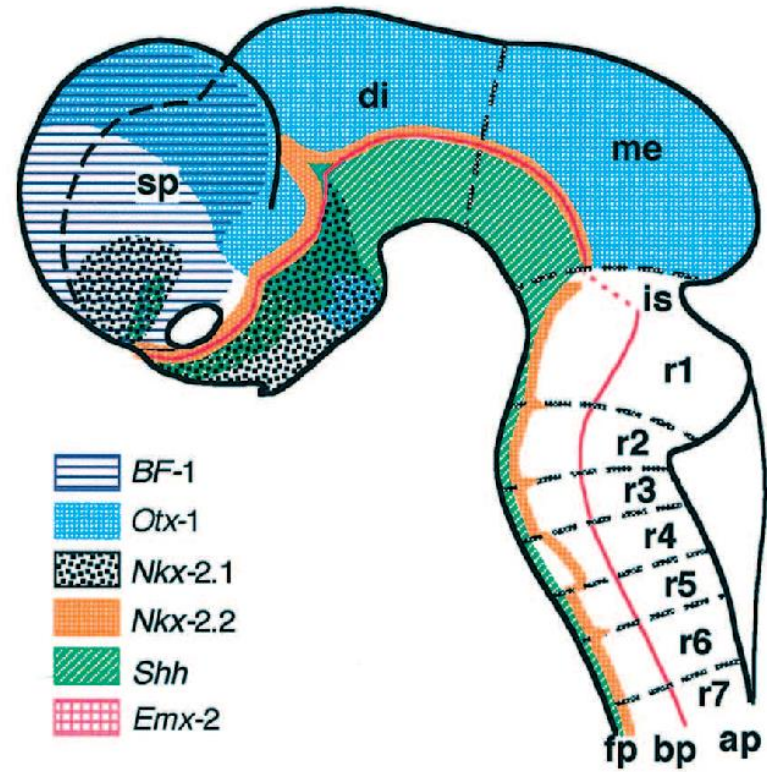


Brain development

A Neural plate
(7-8 somites)



B 10.5 dpc brain



Brain development

