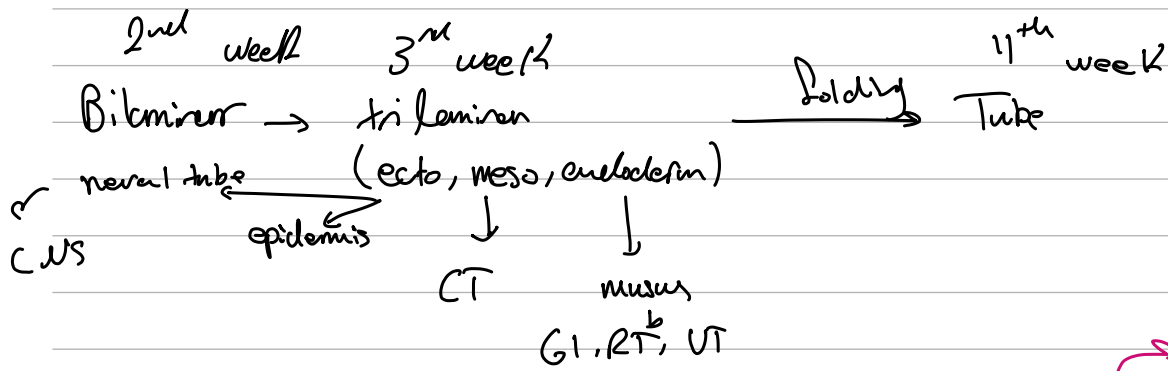
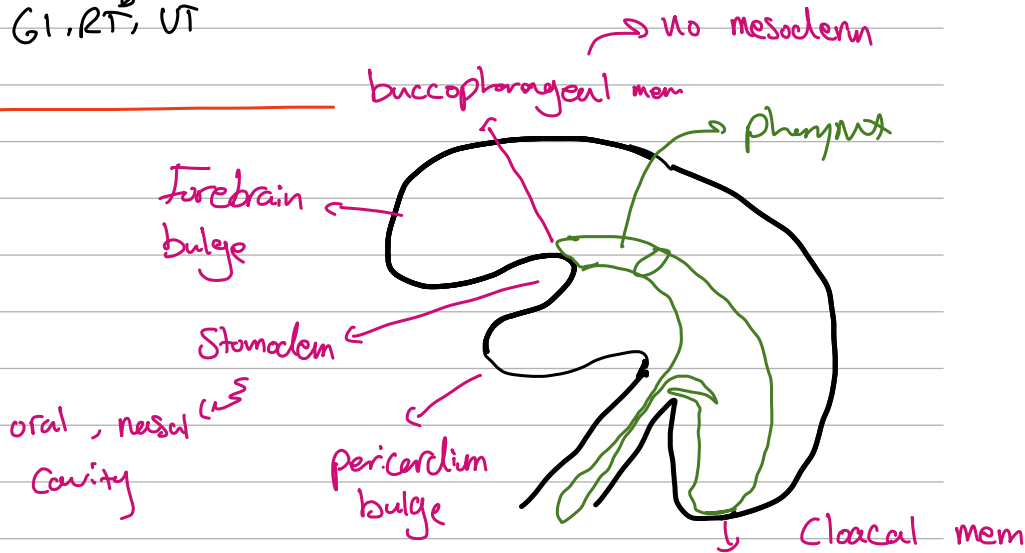


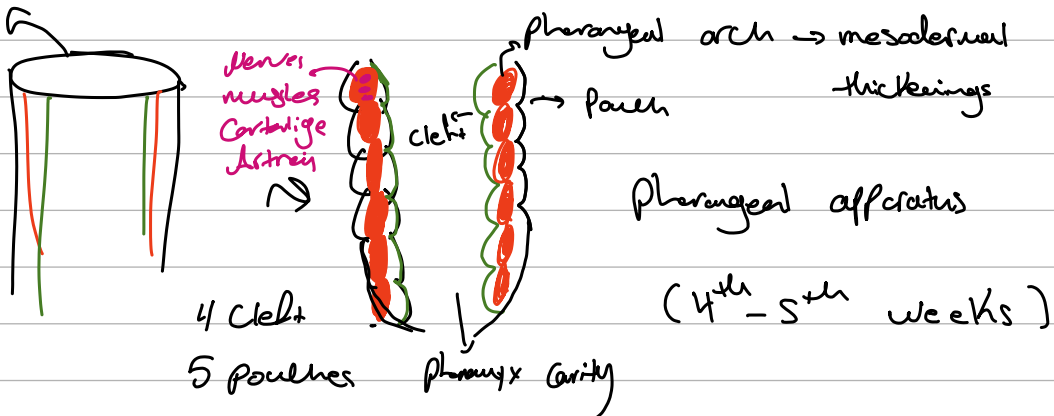
Embryo MSS



by 4th week it ruptures so that stomodaeum communicates with foregut



Buccopharyngeal mem



Pharyngeal (branchial) arches

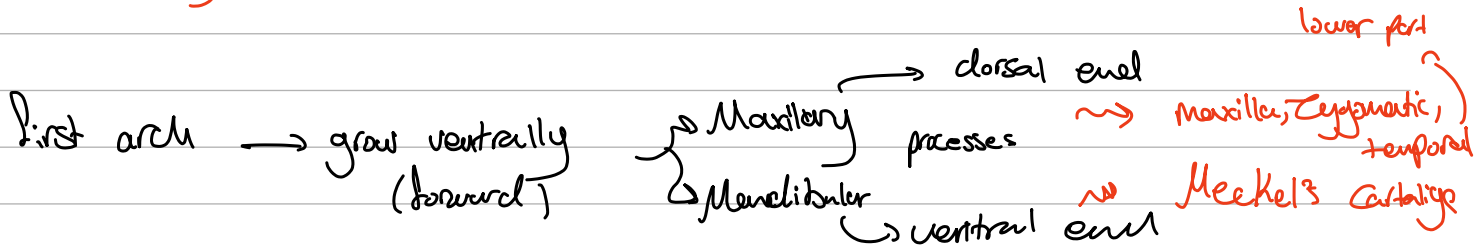
Side of pharynx

resemble gills of fish
↓
branchia

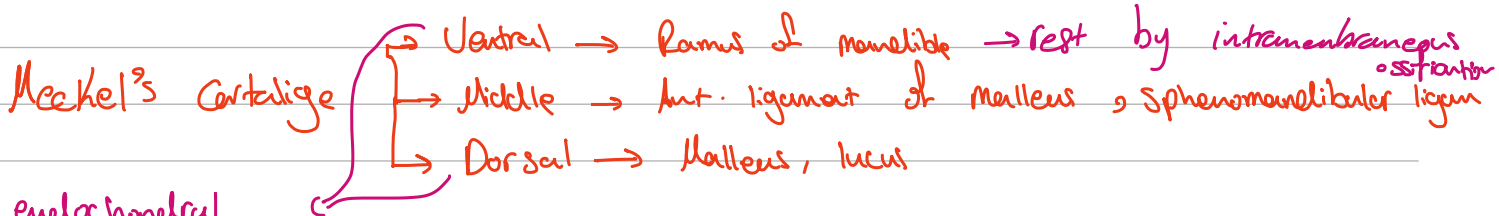
Nerve supply to arches

- 1 → Maxillary, Mandibular 2 → Facial N 3 → Glossopharyngeal N
4 → Superior laryngeal N (Vagus N) 6 → Recurrent laryngeal N (Vagus N)

* Supply mucosa and muscles derived from the arch



Muscle (supplied by mandibular) → Mylohyoid, Tensor tympani, Ant. belly of digastric, Tensor palatini



endochondral ossification

the processes close stomodeum from sides

Second arch

Muscles (supplied by Facial N) : Muscles of facial expressions, Stylohyoid, Post. belly of digastric

* Remaining arches for other systems

Clefts

First (between 1st and 2nd arches) → External auditory meatus, later of tympanic mem

Second, third, fourth is covered by the downward growth of 2nd arch
§

Space → Cervical Sinus → obliterated

!! it not → cervical cyst (L of Ant. of sternocleidomastoid muscle)

Palates (5)

First, Second → Occupied by the developing tongue (ventrally)

↓ ↓
Dorsally

↓
Floor of pharynx

Palatine tonsils

Inner mucous

layer of tympanic

membrane & middle

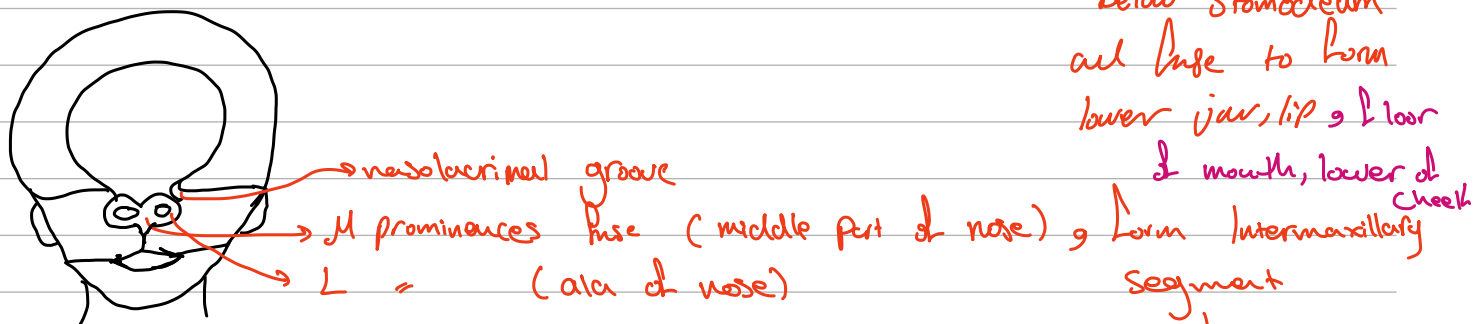
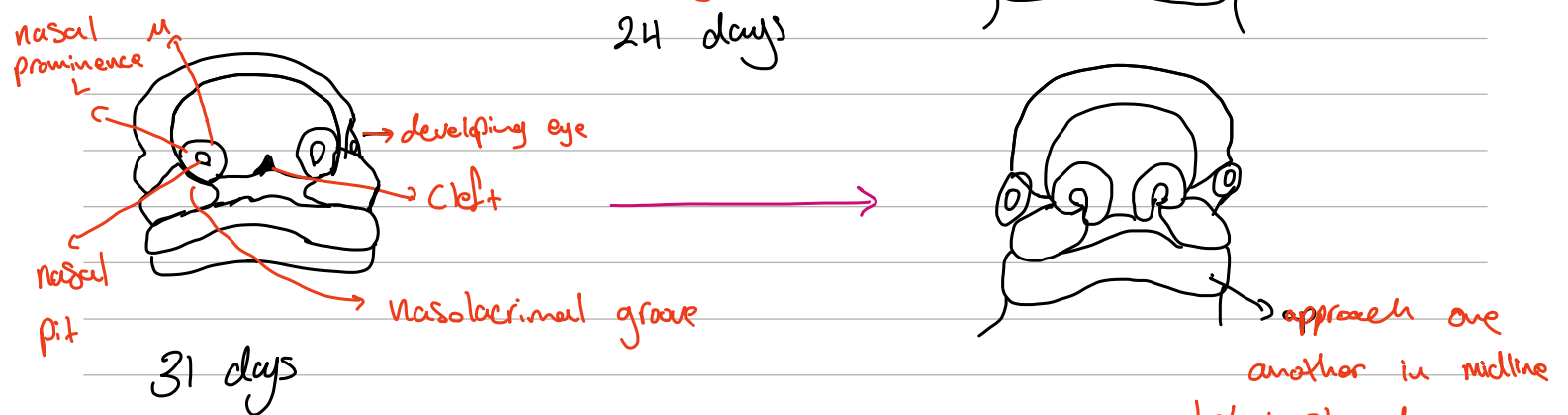
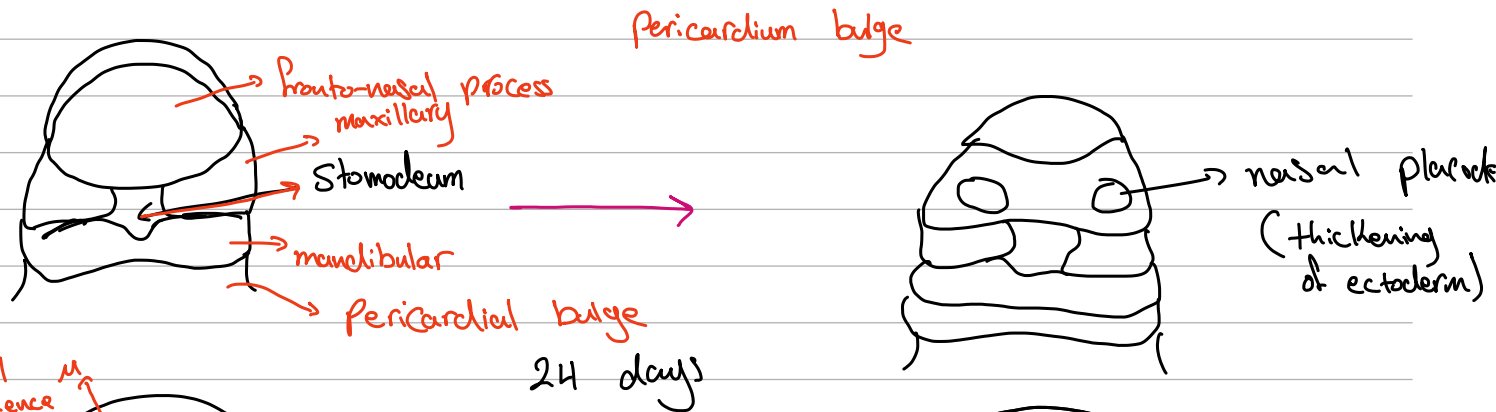
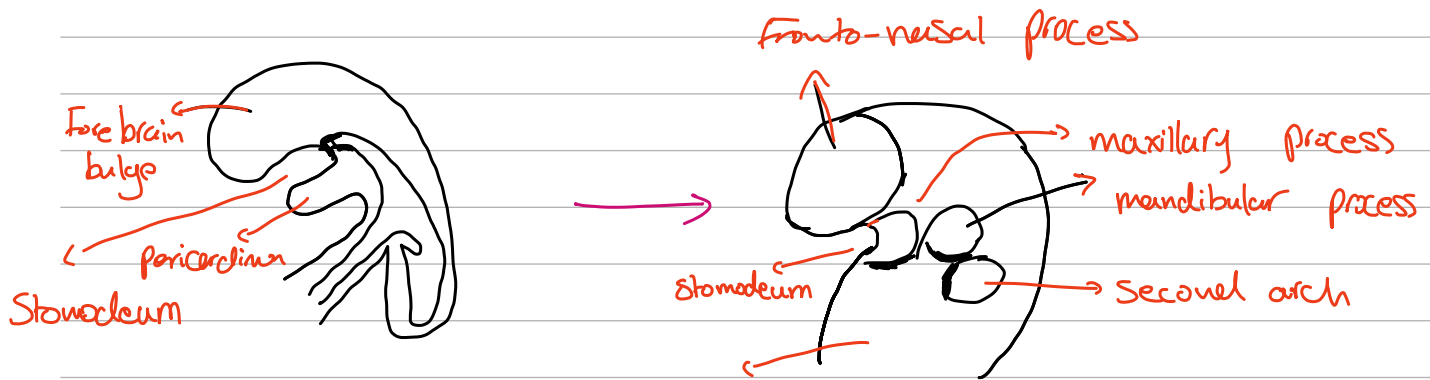
ear & Eustachian

tube

Pre-tertiary N → cross from one arch to other (ex: Chorda tympani)

Ant 2/3 of tongue
(tast) & General
sensory

Development of Face



Maxillary, Mandibular processes fuse partially to form the cheek

form philtrum, part of upper jaw that carry 4 upper incisors and primary palate

Secondary palate

lower eyelids
upper part of cheek
upper lip (except philtrum)
upper jaw C // upper incisors

Separate Stomodeum into oral and nasal cavities

Secondarily → palatine shelves of maxillary processes

Congenital anomalies

1) **Dermoid cyst** → fusion between frontonasal, maxillary → cystic swelling

2) **Oblique facial cleft** → failure of fusion " "

3) **Macrostomia or Microstomia** → defective or marked fusion between maxillary and mandibular

Common (1 per 1000)

4) **Uni, Bilateral cleft lip** → failure fusion (maxillary, intermaxillary segment)

5) **Median cleft lip** → " " (11 nasal prominences)

6) **Cleft lower lip** → incomplete fusion of mandibular processes

7) **Cleft palate** → failure fusion of different parts that form palate

