

* Cranial Nerves -

7F 9g
 A b c
 (A) b (c)
 (6) Ab (1) Ac

→ 12 Pairs of cranial Nerves -

- | | | | |
|-----|----------------------|-----------|------------------|
| 1) | Olfactory N. | } Sensory | } Fore Brain |
| 2) | Optic N. | | |
| 3) | Oculomotor N. | } Motor | } Mid Brain |
| 4) | Trochlear N. | | |
| 5) | Trigeminal N. | - Mixed | } Pons |
| 6) | Abducens N. | - Motor | |
| 7) | Facial N. | - Mixed | |
| 8) | Vestibulocochlear N. | - Sensory | - Pons + Medulla |
| 9) | Glossopharyngeal N. | } Mix | } Medulla |
| 10) | Vagus N. | | |
| 11) | Accessory N. | } Motor | |
| 12) | Hypoglossal N. | | |

Sensory	2	Fore Brain
Motor	2	Mid Brain
Mix - Motor - Mix	3	Pons
Sensory	2	P + M.O
2 x Mix - 2 x Motor	4	M.O

→ 3-12 cranial N. arise to Brain Stem, In Ventral side

★ CN.4 arise in Dorsal side

Date _____
Page _____

Name	Function	Origin
1) Olfactory.	- smell	Olfactory Bulb (Fore Brain)
2) Optic	- vision	(Occipital lobe Back of eyeball)
3) Oculomotor	- eyeball movement - Pupil constriction	Mid Brain - ↓
5) Trigeminal	V1 - sensory information V2 - " " V3 - S:- " " M:- Chewing - Touch, Pain, Temperature - Chewing, facial expression	
4) Trochlear	- eyeball movement lateral turning	
6) Abducens	- eyeball movement lateral turning	
7) Facial	- facial expression, movement of Neck, tongue	
8) Vestibulo Cochlear	- Hearing & equilibrium	
9) Glossopharyngeal	- Taste & elevation of larynx.	
10) Vagus	- Sensation of visceral movement	
11) Accessory	Movement of Pharynx Neck, shoulders, Tongue.	
12) Hypoglossal		

Teacher's Signature.....

origin

CN. I → olfactory Bulb

CN. II → Retina
(Back of eye)

] Forebrain
(cerebrum)

CN. III → Ant. Surface

CN. IV → Post. Surface

] Mid Brain

CN. V → S. - Face, M. - chewing

CN. VI → eye muscle

CN. VII → S. - Taste buds - M.

CN. VIII → ear & parts

] - Pons.

CN. IX →

CN. X → (cranial)
(longest N.)

CN. XI →

CN. XII →

] → M.O

Stem

Brain

* Opening of skull

1) Optic canal → CN. 2/0 9

2) Superior orbital fissure → CN. 3
4

5 (V1) ophthalmic
6

3) Foramen Rotundum → CN. 5 (V2)

Maxillary

4) Foramen ovale → CN. 5 (V3) Mandibular

5) Internal acoustic meatus → CN. 7
8

6) Jugular foramen → CN. 9

10

11

7) Hypoglossal canal → CN. 12

* Trigeminal N. (CN.5)

V1 - Ophthalmic N.

- Sensory N.

function - control for Head skin, scalp, eyelid, nose
Pars Nasal sinus.

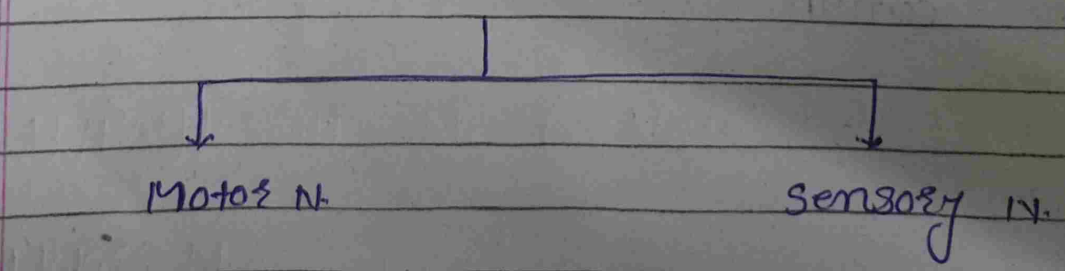
V2 - Maxillary

- Sensory N.

function - Sensory function of face over Maxilla.
- upper jaw Teeth.
- Mucous membrane of nose, palate.

V3 - Mandibular N.

- Mixed N.



- Tensor Tympani
- Muscle of Mastication
- Tensor Veli Palatine

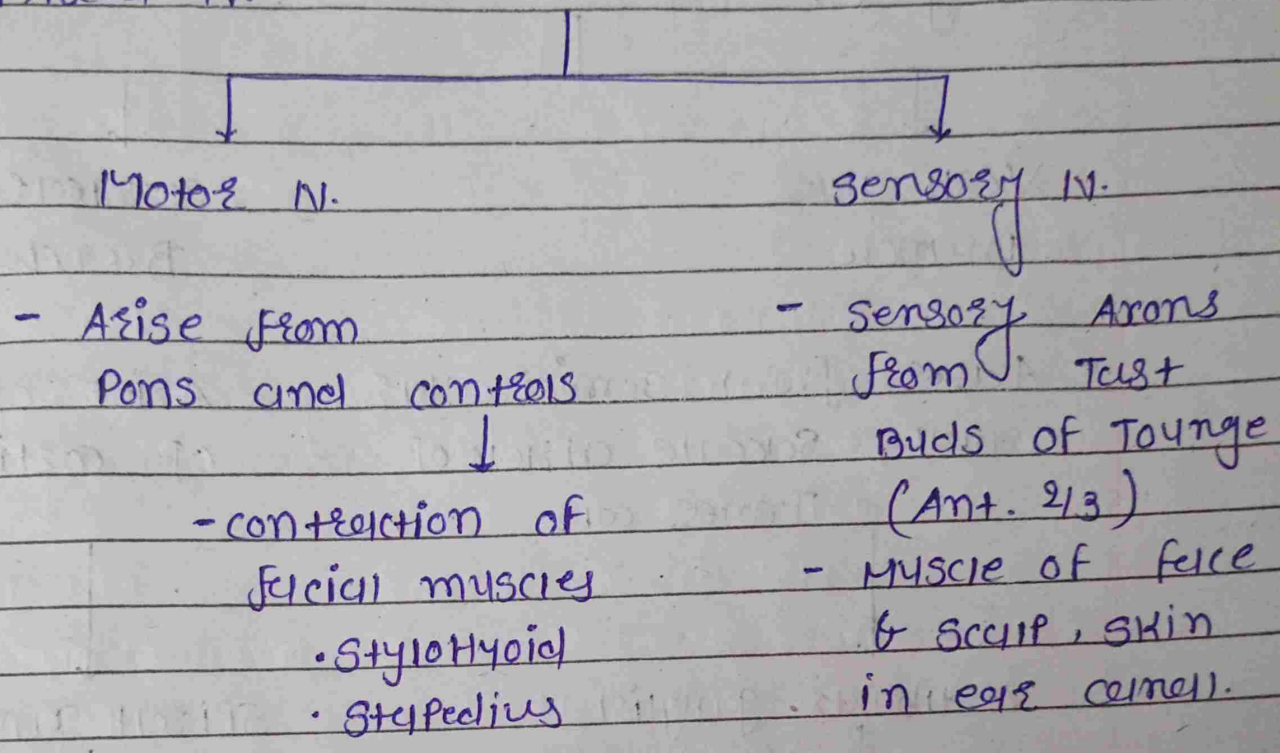
Responsible for chewing.

- Skin of cheek.
- Skin over Mandible & side of Head
- TMJ & lower jaw

Teacher's Signature

* Facial Nerve (CN. 7)

- Mixed N.



→ ALSO acts as Parasympathetic Nerve and supplies

- Lacrimal gland
- Nasal gland
- Palatine gland
- Sublingual gland
- Submandibular gland

⊛ Vestibulo-cochlear N. (CN: 8)

- Sensory N.

Vestibular Branch

Cochlear Branch

- Arises from semicircular canal; Saccule & utricle of Inner ear

- Arise of organ of Corti

Vestibular ganglion

Spiral ganglion

M.O.

M.O.

Impulses for equilibrium

Impulse for Hearing

⊛ Hypoglossal N. (CN-12)

- Motor N.

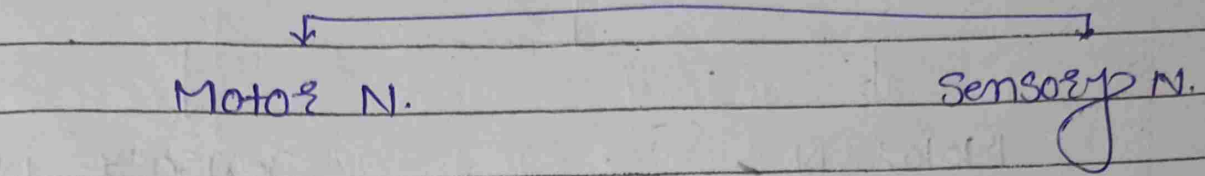
- arise from Hypoglossal nuclei in M.O

Impulse for speech + swallowing

Teacher's Signature

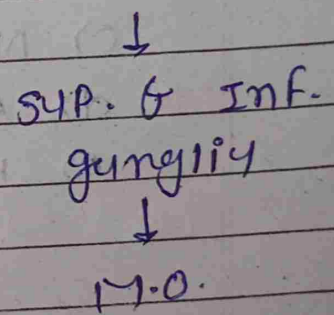
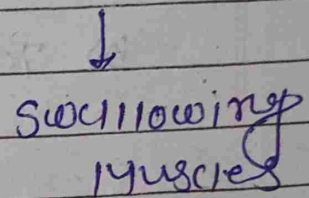
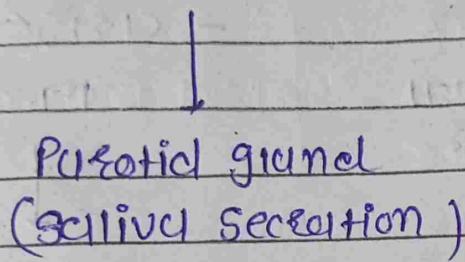
(*) Glossopharyngeal N. (CN. 9)

- Mixed N.



- arise to M.O

- Taste Bud of Post. 1/3 of Tongue



(*) Accessory N. (CN. 11)

- Motor N.

arises from 1st 5 cervical spinal N. (C1 to C5)

carries impulses to Sternocleidomastoid & Trapezius (Head movement & coordination)

(*) Vagus N. (CN. 10)

- Mixed N.

Motor N.

Sensory N.

- arise from

- a) Skin of external ear.

- b) Taste buds of epiglottis & pharynx

- c) Neck & throat

- d) Arch of aorta

- e) Most of thoracic & abdominal organs

M.O

Pons

- arise from

M.O

Muscle of pharynx, larynx, soft palate
↓
use in swallowing & vocalisation

→ ALSO acts as parasympathetic N.

Supplies → Lungs, Heart, GIT, Respiratory
oesophagus etc