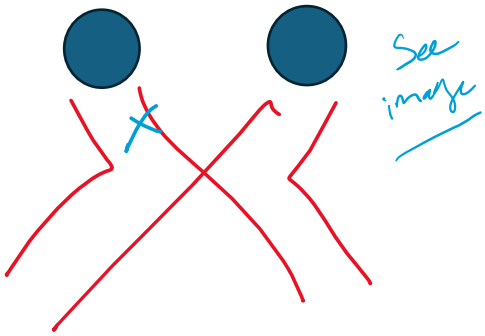
Cranial nerves:

1- Olfactory: enter the brain (sensory): test by smelling "close patient eye and test each nostril alone
    a. Cold and flu viruses (covid)
    b. Meningioma
    c. Trauma and fracture
    d. Anfrontal surgery
    e. Congenital anosmia syndrome
    f. kallman syndrome (congenital)



2- optic: enter skull through optic canal:
    a. MS
    b. DM
    c. Pituitary tumor
        i. Each aye: Visual acuity (6m from the chart, or count my fingers), color vision torch and see if he see the light (light blind)
        ii. Confrontation Test (to see visual fields common in supra chiasmic lesion pituitary tumors) don't move head or eye) close the examiner and patient one eye then test the whole field in each eye (nasal and temporal fibers of the same eye so you have to change your hand that cover your eyes)
        iii. Light reflex (direct and indirect)
        iv. Accommodation reflex
        v. Fundoscopy
3- Oculomotor: (the oculomotor supply: inf ob, med, in, sup rectus – not s ob or lat rectus) comes from superior orbital fissure caused by DM, systemic lupus SLE and vasulitis, tumor in brain stem, cavernus sinus thrombosis (if absent reflexes then he has something pressing require surgery), if there is reflexes then he require medical treatment from inside the eye not surgical
4- abducent (look at you nose) test eyes together.
5- trochlear (test each eye alone in the lateral side)
6- trigeminal : comes from opth: super fissure sensory supply forehead and upper eyelid and sensation of the eye corneal reflex "afferent" but the effernt for this reflex is the facial, maxillary from foramen reductant supply skin and lower eyelid upper lip and teeth, ovaly the mandubuler division is motor for masseters temporalis and trigoid and anterior two third of the tongue pain and temperature. Sensation by a cotton on the face each time one side. Cring teeth, open mouth and see month deviation to the side of diseased then do jaw reflex
7- facial: from stylomastoid foramen. Moter of facial expression and sensory for external appustic meautus of pain and temperature , special sense of ant. Third and branch to stapedius parasympathetic to sybmandiblar gland through the parotid.. examined by by raise eye brow, resist opening of the eye orbitalis ovuli, paccinator blow mouth and hold then push the cheeks, whistle, platysma by glinching the mouth.. diffreciate taste by putting coffee
    a. upper fcial pulsy: ramsy hand syndrome (shingles and lowers facial pulsy) if UMNL then he cannot do upper muscles like raise brow
    b. but the lower bilateral facial nerve pulsy: lime disease and GBS, sarcoilosis:

8- vistibulococcular: rennee test (normally has air conduction more than bone or he has sensory deffness) might be caused by constant noise, drugs like aminoglicosides, gentamisin. weber test (tuning fork on the middle of the forehead up and the patient will hear by good ear .. if conduction impaired than positive rennee (tpanic ruture, wax, obstruction)
    a. renee negative and lateralization is conductive deafness
    b. conduction lateralization to the normal side
    c. bendant syndrome
9- glossopharantial: come from jagular forman: motor to uvula, senory for stylopharangial special sense and pain tem for posterior tongue: test by gag reflex and see uvula (caued by medulla oblongata disease)
10- vagus (cant cought) psudobulber pulsy or bulber pulsy (all these nerves 10, 11, 12) has nasal speech in bulber but in psudo like potato speech (UMNL for 9-10-11-12) can deferential by speech type (nasl lowe, potato upper)
11- accessory : shrug shoulder
12- hypoglossal all intrinsic and extrinsic muscle of the tongue except the palate glosas upper and lower glossophangial palsy by stroke
    a. not talking see faciculation then lower MNL
    b. spastic tongue then UMNL
    c. tongue go to the affected side