

Table of Cranial Nerves

Cranial Nerve	Foramen of Exit From Skull	Other Associated Foramen	Branches	Type of Nerve Impulse	Area Supplied and Function
I (olfactory)	cribriform plate	none	olfactory filaments	special sensory (afferent)	nasal mucosa, smell
II (optic)	optic foramen	none	none	special sensory (afferent)	retina, vision
III (oculomotor)	superior orbital fissure	none	superior division inferior division	general motor (efferent) parasympathetic motor	muscles: superior rectus, levator palpebrae superioris muscles: medial rectus, inferior rectus, inferior oblique, parasympathetic to ciliary ganglion for pupillary constriction
IV (trochlear)	superior orbital fissure	none	muscular	motor (efferent)	superior oblique muscle
V (trigeminal)	see below	see below	see below	general motor (efferent) general sensory (afferent)	see below
V ₁ (ophthalmic)	superior orbital fissure	supraorbital foramen anterior & posterior ethmoidal foramina	meningeal, frontal, lacrimal, nasociliary	general sensory (afferent)	sensation from dura, skin of forehead, scalp, roof of nasal cavity and skin on tip of nose, ethmoid air cells
V ₂ (maxillary)	foramen rotundum	inferior orbital fissure infraorbital foramen	meningeal, infraorbital, posterior & anterior superior alveolar branches, zygomatic, sensory roots to pterygopalatine ganglion, greater & lesser palatine	general sensory (afferent)	sensation from dura, nasal mucosa, soft palate, skin of lower eyelid and beneath the eye, side of nose, cheek, lip, upper teeth, hard palate
V ₃ (mandibular)	foramen ovale	mandibular foramen	meningeal, auriculotemporal, buccal, lingual inferior alveolar	general sensory (afferent) general motor (efferent)	sensation from dura, anterior ear and scalp, mucosa lining cheek and gums, skin of cheek, lower teeth, skin of chin. motor to temporalis, masseter, medial pterygoid, lateral pterygoid, anterior belly of digastric, mylohyoid, tensor palati, and tensor tympani.
VI (abducens)	superior orbital fissure	none	muscular	general motor (efferent)	lateral rectus muscle

VII (facial)	internal auditory meatus	hiatus of facial canal facial canal stylomastoid foramen	greater petrosal nerve, chorda tympani auricular branch, facial branches, cervical branches	special and general sensory (afferent) general and parasympathetic motor (efferent)	sensation of taste for anterior 2/3 tongue, skin from external meatus, taste from palate. motor to muscles of facial expression, stapedius muscle, muscles of auricle, parasympathetic motor to pterygopalatine ganglion for lacrimal secretion, motor to submandibular ganglion to submandibular and sublingual glands for secretion.
VIII (vestibulocochlear)	internal auditory meatus	none	vestibular, cochlear	general sensory (afferent)	sensation from cochlea for hearing and from semicircular canals and vestibule for equilibrium
IX (glossopharyngeal)	jugular foramen		muscular branches, auricular branch, lingual branch, branch to carotid body and sinus, tympanic branch, lesser petrosal	general and special sensory (afferent) general and parasympathetic motor (efferent)	special sensation of taste from posterior 1/3 of tongue, general sensation from the oropharynx, posterior 1/3 of tongue, sensation from pharyngeal mucosa, special sensation from carotid body and sinus. general motor to stylopharyngeus muscle, parasympathetic to the otic ganglion for parotid gland secretion.
X (vagus)	jugular foramen	none	palatopharyngeal branch, superior laryngeal branch, recurrent laryngeal branch, carotid sinus nerve, cardiac, pulmonary, gastric, renal, hepatic, pancreatic, small intestine, large intestine branches.	sensory (afferent) motor (efferent)	special sensation of taste from base of tongue and epiglottis, general sensation from soft palate, upper larynx, special sensation from carotid body. motor to muscles of soft palate (except tensor palati), muscles of pharynx (except for stylopharyngeus), muscles of larynx, cardiac muscle, smooth muscle of lungs, muscles of intestinal tract as far as the left colic flexure..
XI (spinal accessory)	jugular foramen	foramen magnum	muscular	motor (efferent)	cranial part: provides motor to vagus spinal part: sternomastoid and trapezius muscles
XII (hypoglossal)	hypoglossal foramen	none	muscular	general motor (efferent)	motor to styloglossus, hyoglossus, genioglossus and intrinsic muscles of the tongue.