

Foramina in the Skull (and what goes through them)

Name of Opening	What Goes Through	Where to See It	Direction of Opening
Foramen Magnum	Spinal Cord	From inside the cranial cavity AND from outside the cranial cavity (on the inferior surface)	Superior/inferior
Jugular Foramen	Cranial Nerves IX, X, and XI Internal Jugular Vein	From inside the cranial cavity AND from outside the cranial cavity (on the inferior surface)	Superior/inferior
Hypoglossal Foramina	Cranial Nerve XII	Within the foramen magnum	Medial/lateral
Internal Acoustic Meatus	Cranial Nerves VII and VIII	From inside the cranial cavity ONLY	Medial/lateral
Stylomastoid Foramen	Cranial Nerve VII (motor part)	From outside the cranial cavity ONLY	Superior/inferior
Superior Orbital Fissure	Cranial Nerves III, IV, VI, and V1 (ophthalmic division of V)	From inside the cranial cavity AND from outside the cranial cavity (through the orbit)	Anterior/posterior
Foramen Rotundum	Cranial Nerve V2 (maxillary division of V)	From inside the cranial cavity ONLY	Anterior/posterior
Foramen Ovale	Cranial Nerve V3 (mandibular division of V)	From inside the cranial cavity AND from outside the cranial cavity (on the inferior surface)	Superior/inferior
Cribriform Plate of Ethmoid Bone	Cranial Nerve I	From inside the cranial cavity ONLY	Superior/inferior
Optic Canal	Cranial Nerve II	From inside the cranial cavity AND from outside the cranial cavity (through the orbit)	Anterior/posterior

Cranial Nerves

Number	Name	Sensory (Afferent) General or Special Sensory	Motor (Efferent) Voluntary Motor or Parasympathetic
I	Olfactory	Special Sensory (smell)	--
II	Optic	Special Sensory (vision)	--
III	Oculomotor	--	Voluntary Motor (4 extraocular muscles) Parasympathetic (pupillary sphincter)
IV	Trochlear	--	Voluntary Motor (1 extraocular muscle)
V	Trigeminal	General Sensory (pain, touch, temperature from anterior head, including skin of the face, corneal surface, and anterior 2/3 of tongue)	Voluntary Motor (muscles of mastication)
VI	Abducens	--	Voluntary Motor (1 extraocular muscle)
VII	Facial	Special Sensory (taste from anterior 2/3 of tongue)	Voluntary Motor (muscles of facial expression) Parasympathetic (most glands in the head, but not parotid)
VIII	Vestibulocochlear	Special Sensory (hearing/balance)	--
IX	Glossopharyngeal	General Sensory (pain, touch, temperature from posterior 1/3 of tongue and pharynx) Special Sensory (taste from posterior 1/3 of tongue)	Voluntary Motor (one muscle in pharynx) Parasympathetic (parotid gland)
X	Vagus	General Sensory (pain, touch, temperature from larynx) Special Sensory (taste from epiglottis)	Voluntary Motor (muscles of pharynx and larynx) Parasympathetic (thoracic and abdominal organs)
XI	Spinal Accessory	--	Voluntary Motor (sternocleidomastoid and trapezius)
XII	Hypoglossal	--	Voluntary Motor (muscles of the tongue)