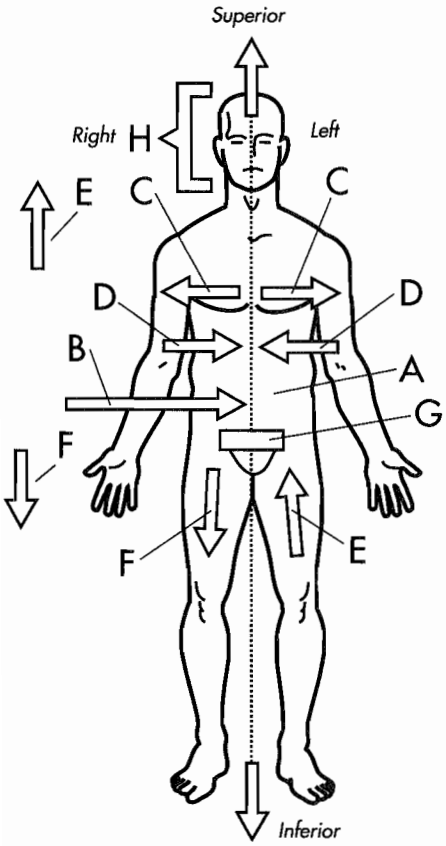
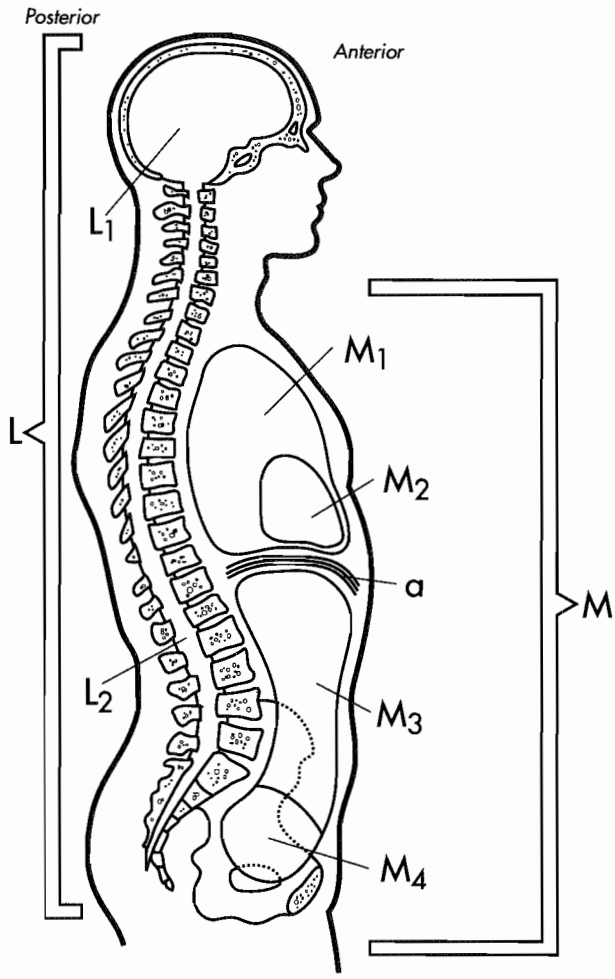
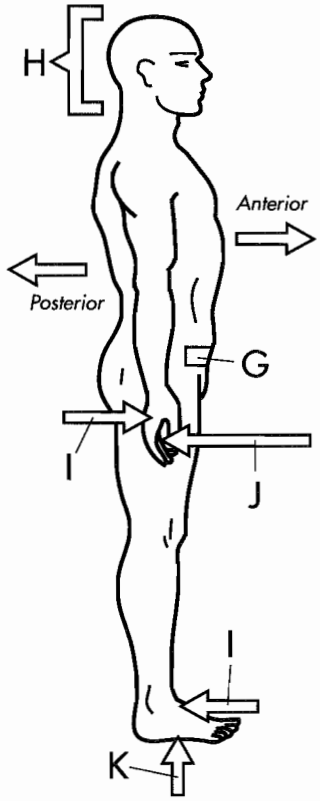
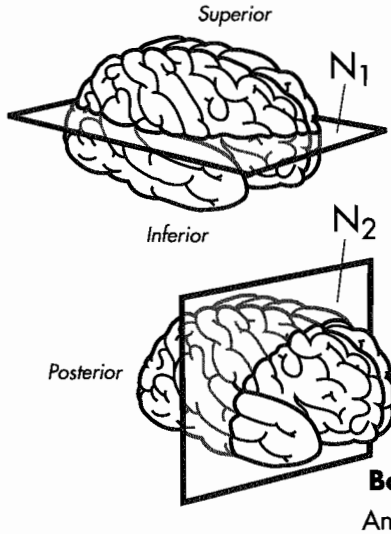
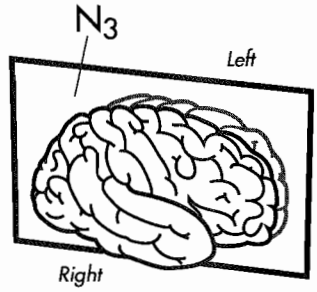
ANATOMICAL TERMINOLOGY











Body Directions

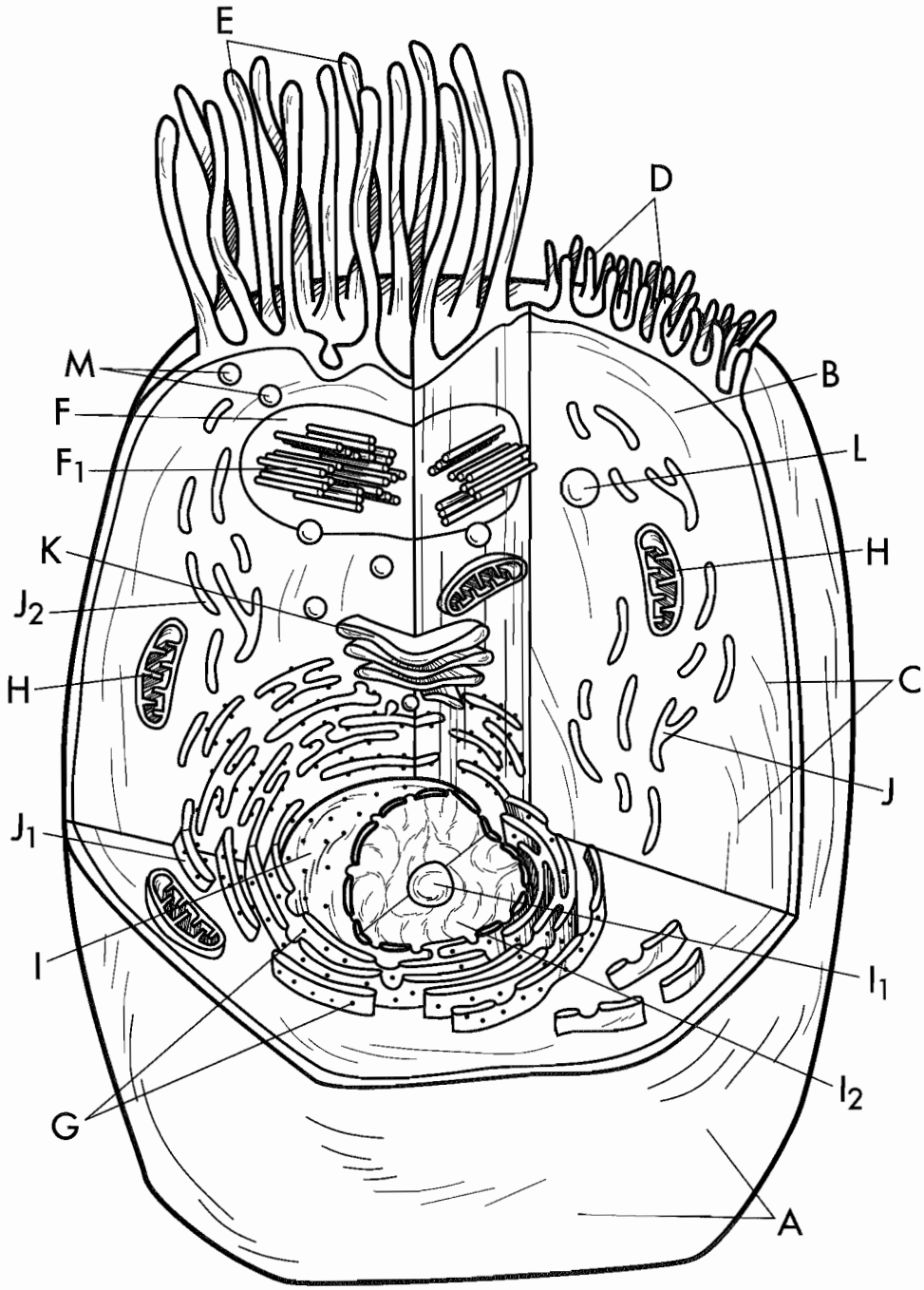
Anatomical position	A	○
Midline	B	○
Lateral	C	○
Medial	D	○
Proximal	E	○
Distal	F	○
Caudal	G	○
Cranial	H	○
Dorsal surface	I	○
Palmar surface	J	○
Plantar surface	K	○
Diaphragm	a	○

Body Cavities

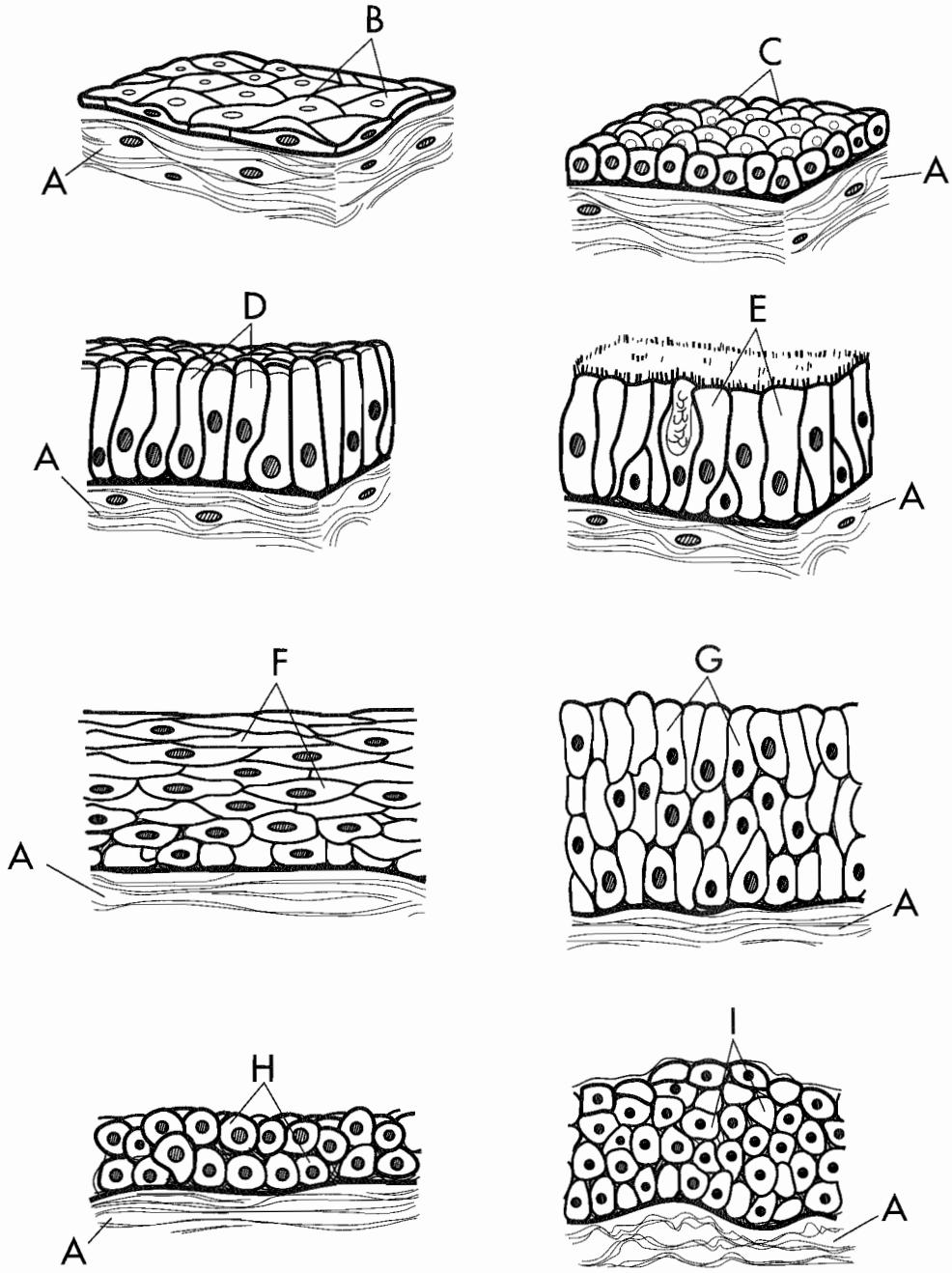
Dorsal cavity	L	○
Cranial cavity	L_1	○
Spinal cavity	L_2	○
Ventral cavity	M	○
Thoracic cavity	M_1	○
Pericardial cavity	M_2	○
Abdominal cavity	M_3	○
Pelvic cavity	M_4	○

Planes

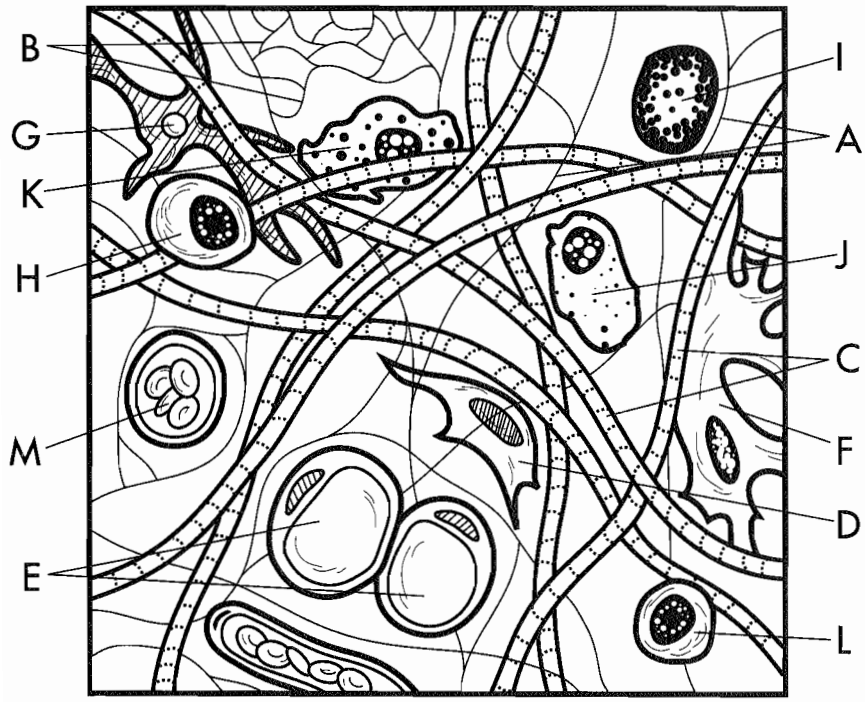
Transverse plane	N_1	○
Frontal plane	N_2	○
Sagittal plane	N_3	○



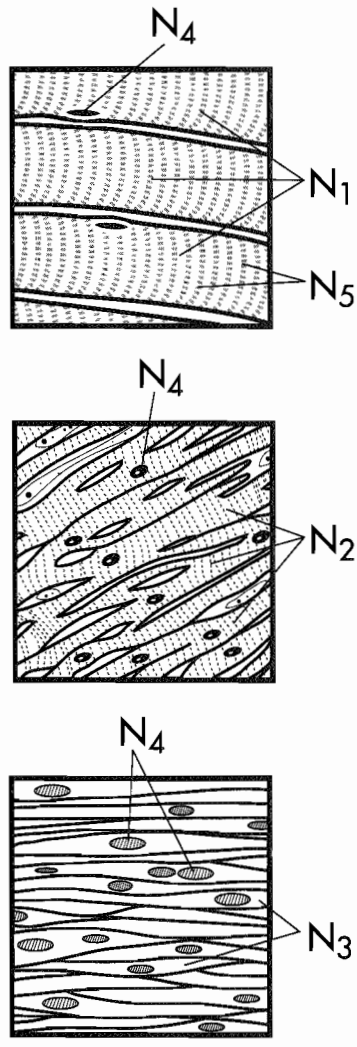
Cell membrane	A	○	Centrioles	F_1	○	Endoplasmic reticulum	J	○
Cytosol (Cytoplasm)	B	○	Ribosomes	G	○	Rough ER	J_1	○
Cytoskeleton	C	○	Mitochondrion	H	○	Smooth ER	J_2	○
Microvilli	D	○	Nucleus	I	○	Golgi body	K	○
Cilia	E	○	Nucleolus	I_1	○	Lysosome	L	○
Centrosome	F	○	Nucleoplasm	I_2	○	Peroxisome	M	○



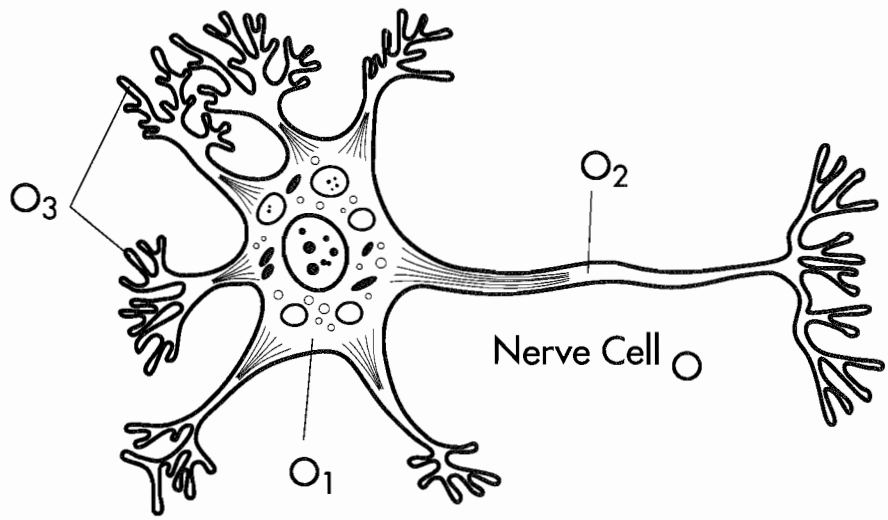
Basement membrane	A	❍
Simple squamous epithelium	B	❍
Simple cuboidal epithelium	C	❍
Simple columnar epithelium	D	❍
Pseudostratified columnar epithelium	E	❍
Stratified squamous epithelium	F	❍
Stratified columnar epithelium	G	❍
Stratified cuboidal epithelium	H	❍
Transitional epithelium	I	❍



Connective Tissue

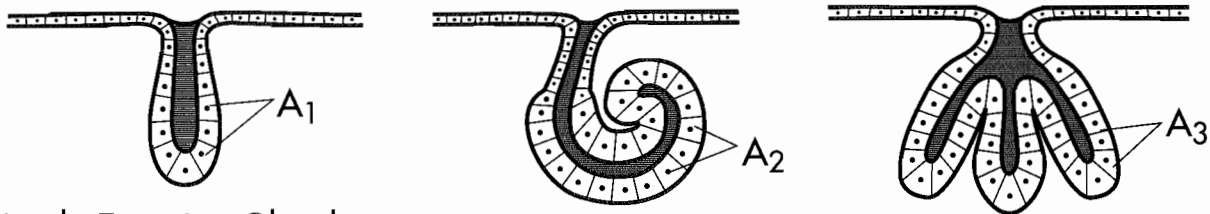


Muscle Tissues N

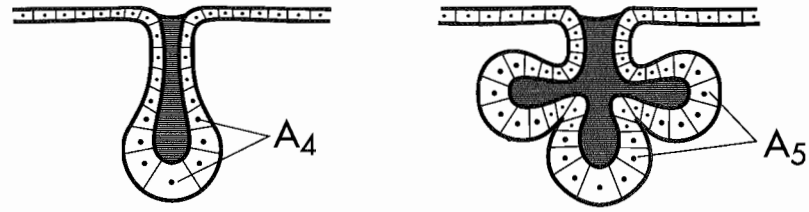


Elastic fibers	A	○	Mast cell	I	○	Smooth muscle	N_3	○
Reticular fibers	B	○	Wandering macrophage	J	○	Nucleus	N_4	○
Collagen fibers	C	○	Sessile macrophage	K	○	Striations	N_5	○
Mesenchymal cell	D	○	Lymphocyte	L	○	Nerve cell	O	○
Fat cells	E	○	Red blood cells	M	○	Cell body	O_1	○
Fibroblast	F	○	Muscle tissue	N	○	Axon	O_2	○
Melanocyte	G	○	Striated muscle	N_1	○	Dendrites	O_3	○
Plasma cell	H	○	Cardiac muscle	N_2	○			

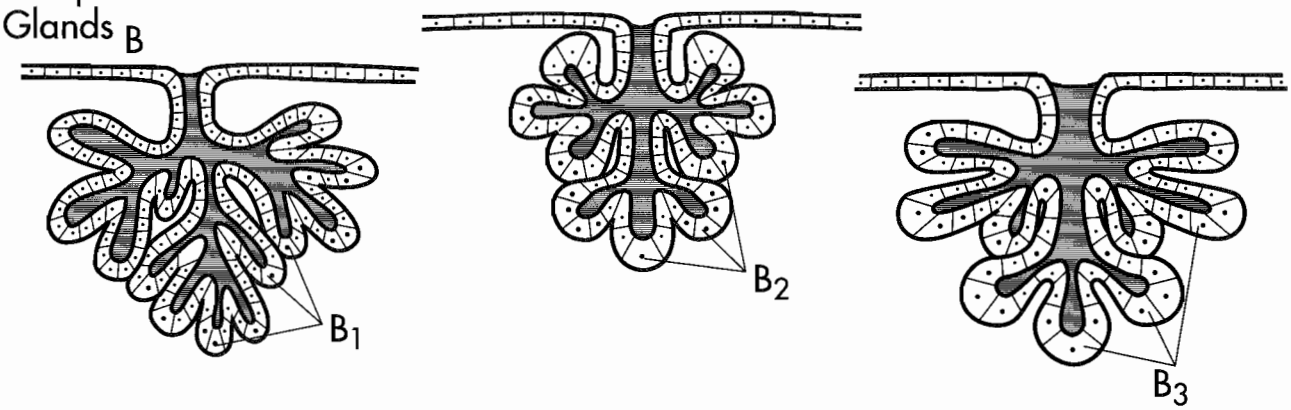
Structural Types ★



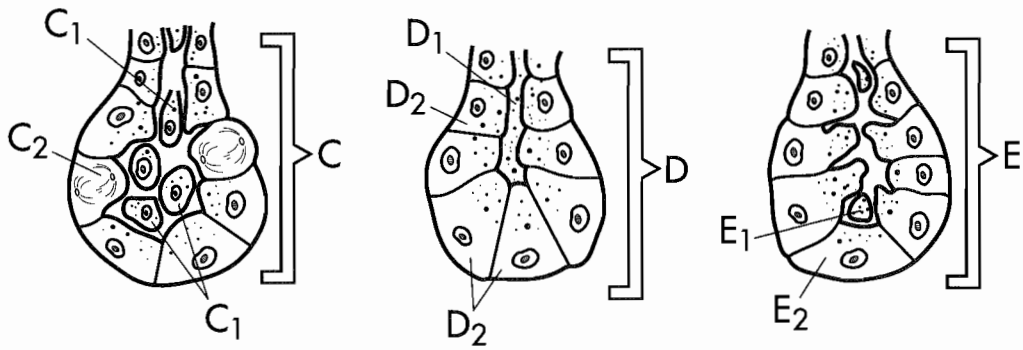
Simple Exocrine Glands A



Compound Exocrine Glands B



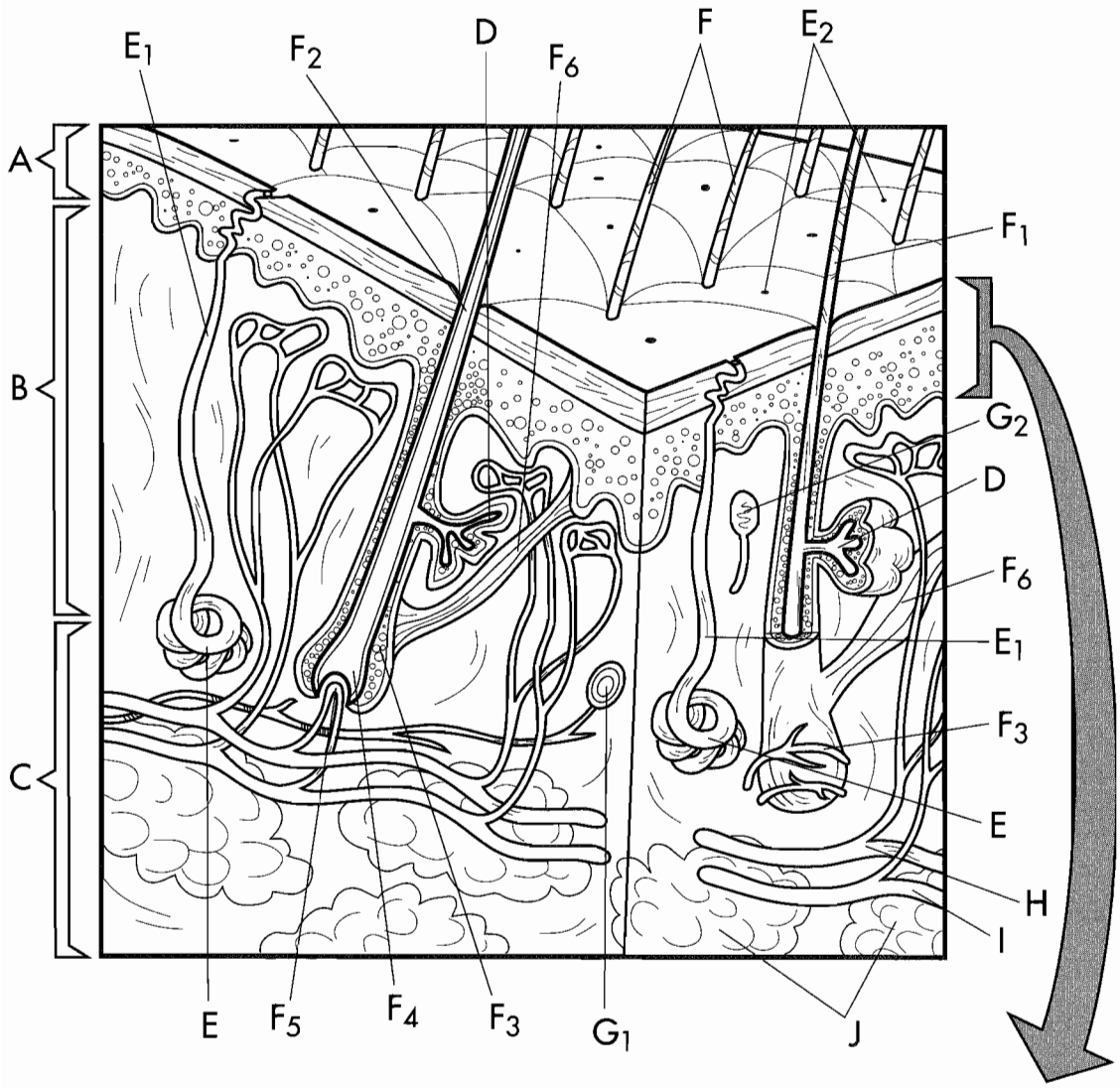
Functional Types ★



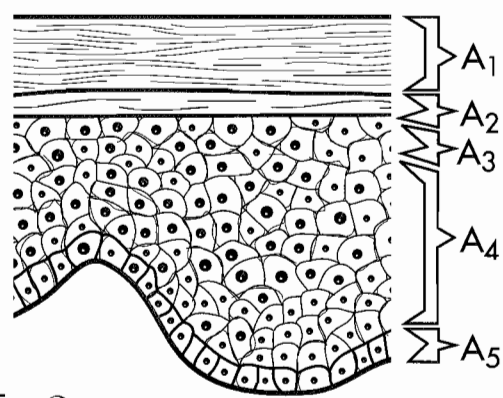
Simple exocrine glands	A ○	Tubular compound gland	B_1 ○	Secretion	D_1 ○
Tubular	A_1 ○	Alveolar compound gland	B_2 ○	Secretory cell	D_2 ○
Coiled	A_2 ○	Tubuloalveolar glands	B_3 ○	Apocrine gland	E ○
Branched	A_3 ○	Holocrine gland	C ○	Cell part	E_1 ○
Simple alveolar glands	A_4 ○	Discharged cell	C_1 ○	Parent cell	E_2 ○
Branched alveolar glands	A_5 ○	Developing cell	C_2 ○		
Compound exocrine glands	B ○	Merocrine gland	D ○		

CHAPTER TWO:

the INTEGUMENTARY SYSTEM



Epidermis	A	○
Stratum corneum	A_1	○
Stratum lucidum	A_2	○
Stratum granulosum	A_3	○
Stratum spinosum	A_4	○
Stratum basale	A_5	○
Dermis	B	○
Hypodermis	C	○
Sebaceous glands	D	○
Sweat glands	E	○
Sweat gland ducts	E_1	○
Sweat gland pores	E_2	○
Hair	F	○
Hair shaft	F_1	○
Root	F_2	○

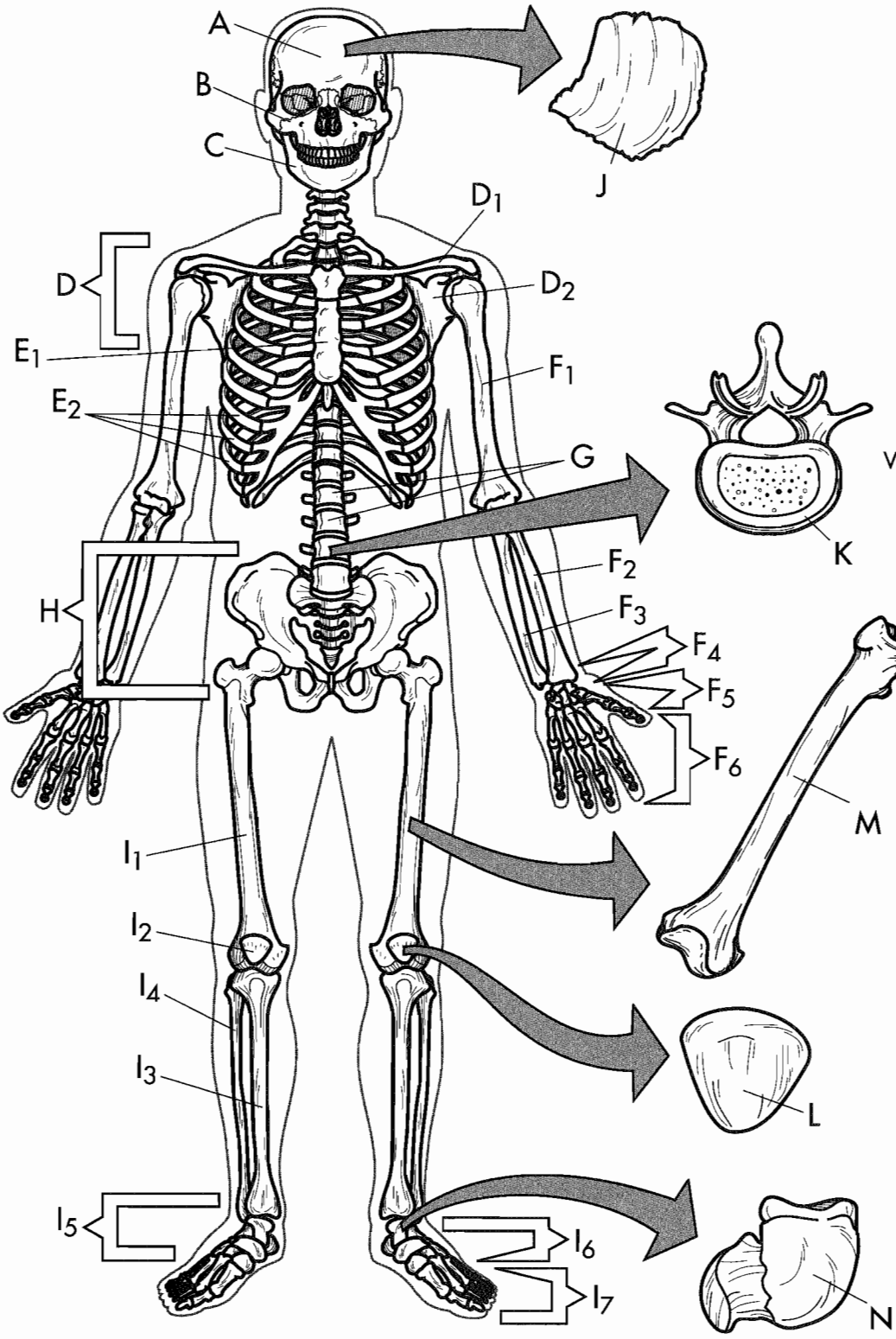


Root sheath	F_3	○
Bulb	F_4	○
Papilla	F_5	○
Errector pilius	F_6	○
Pacinian corpuscle	G_1	○

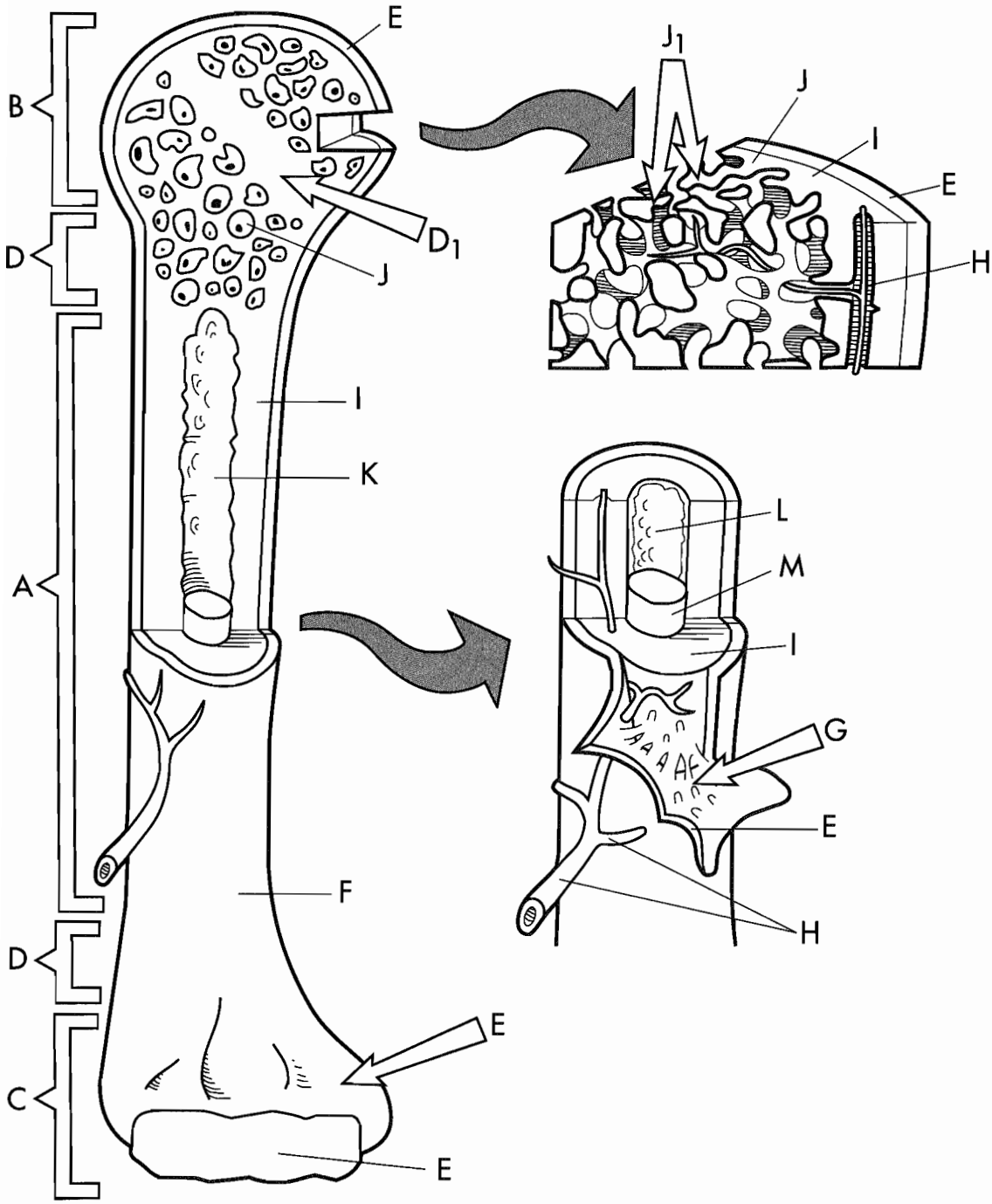
Meissner's corpuscle	G_2	○
Artery	H	○
Vein	I	○
Fat tissue	J	○

CHAPTER THREE:

the SKELETAL SYSTEM



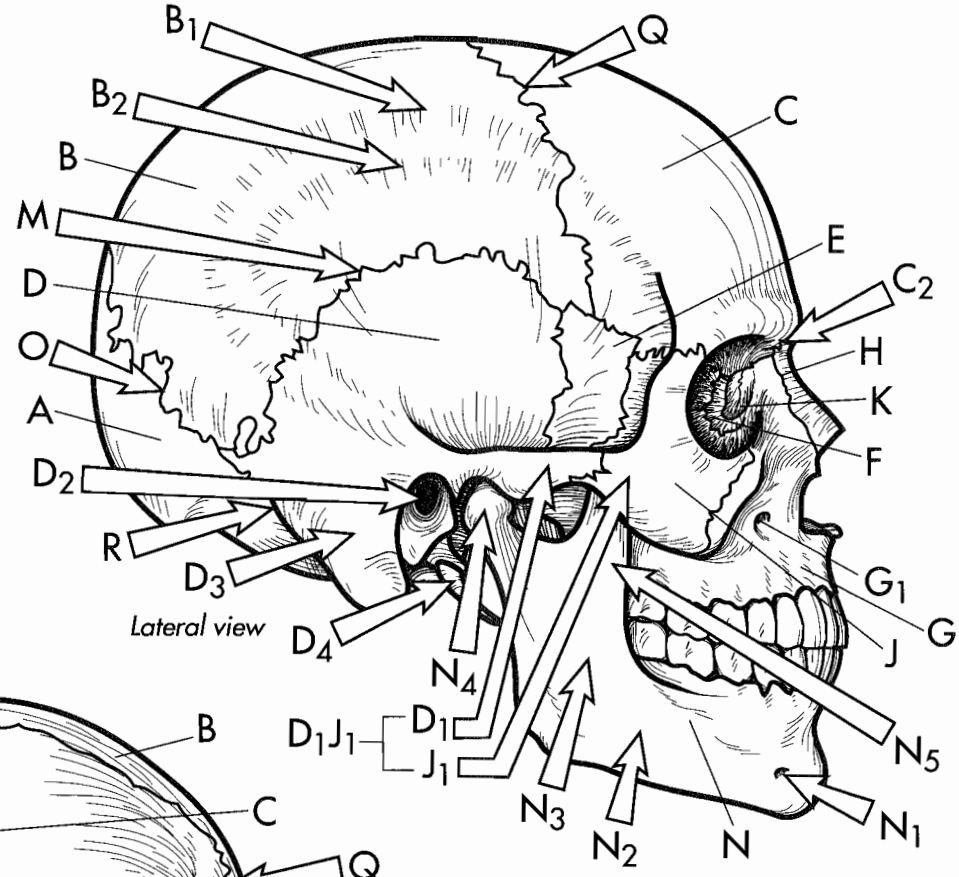
Cranium	A	○
Face	B	○
Mandible	C	○
Pectoral girdle	D	○
Clavicle	D_1	○
Scapula	D_2	○
Sternum	E_1	○
Ribs	E_2	○
Humerus	F_1	○
Radius	F_2	○
Ulna	F_3	○
Carpals	F_4	○
Metacarpals	F_5	○
Phalanges	F_6	○
Vertebral column	G	○
Pelvic girdle	H	○
Femur	I_1	○
Patella	I_2	○
Tibia	I_3	○
Fibula	I_4	○
Tarsals	I_5	○
Metatarsals	I_6	○
Phalanges	I_7	○
Flat bone	J	○
Irregular bone	K	○
Sesamoid bone	L	○
Long bone	M	○
Short bone	N	○



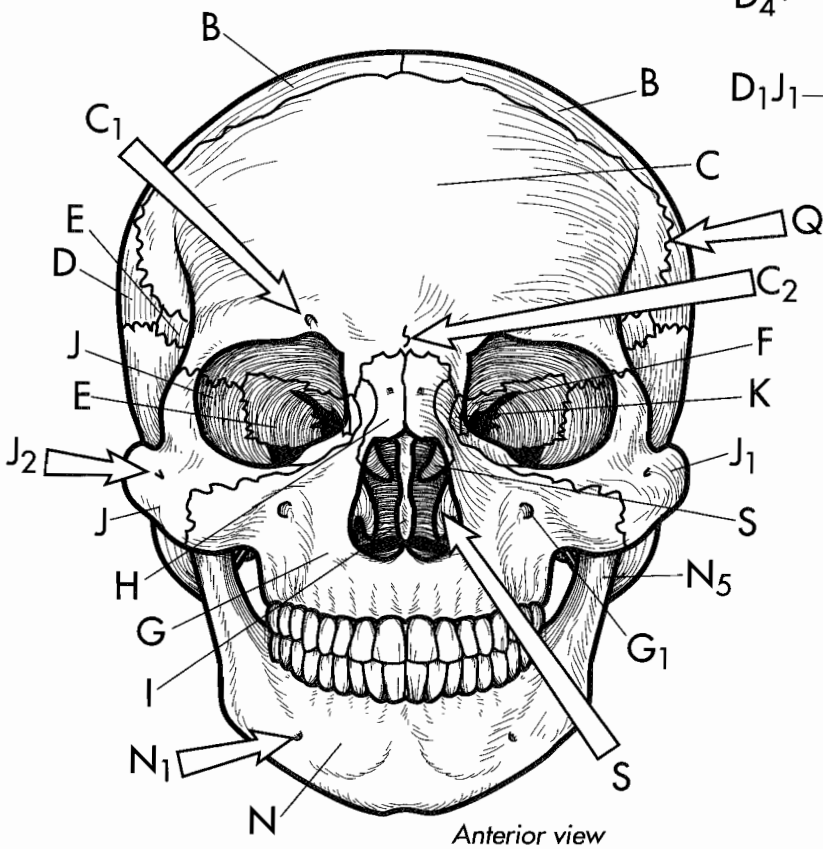
Diaphysis	A	○	Articular cartilage	E	○	Spongy bone	J	○
Proximal epiphysis	B	○	Periosteum	F	○	Trabeculae	J_1	○
Distal epiphysis	C	○	Sharpey's fibers	G	○	Medullary cavity	K	○
Metaphysis	D	○	Nutrient arteries	H	○	Endosteum	L	○
Epiphyseal plate	D_1	○	Compact bone	I	○	Marrow	M	○

THE SKULL–EXTERNAL SURFACE VIEW I

Occipital bone	A	○
Parietal bone	B	○
Superior temporal line	B_1	○
Inferior temporal line	B_2	○
Frontal bone	C	○
Supraorbital foramen	C_1	○
Glabella	C_2	○
Temporal bones	D	○
Zygomatic process	D_1	○
Zygomatic arch	D_1, J_1	○
External auditory meatus	D_2	○
Mastoid process	D_3	○
Styloid process	D_4	○
Sphenoid bone	E	○
Ethmoid bone	F	○
Maxilla	G	○
Infraorbital foramen	G_1	○



Lateral view

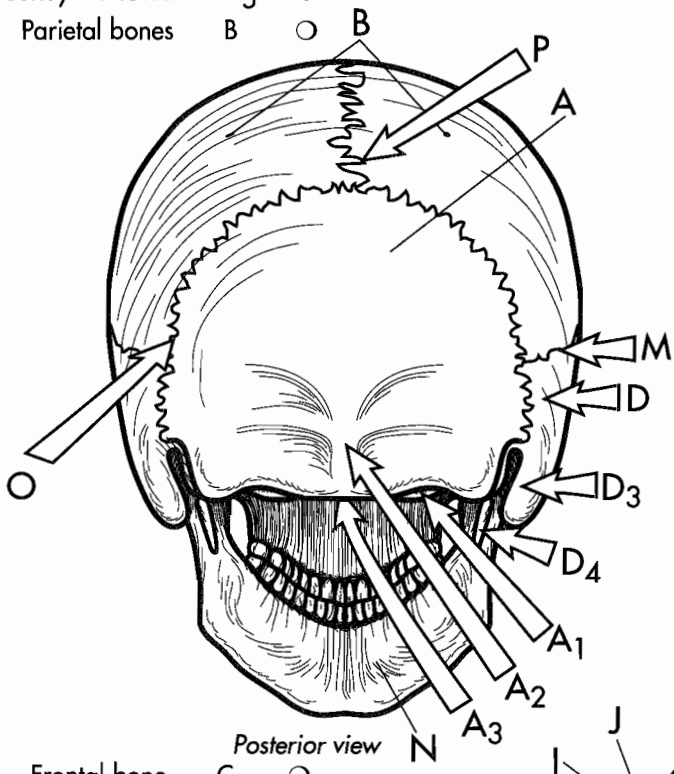


Anterior view

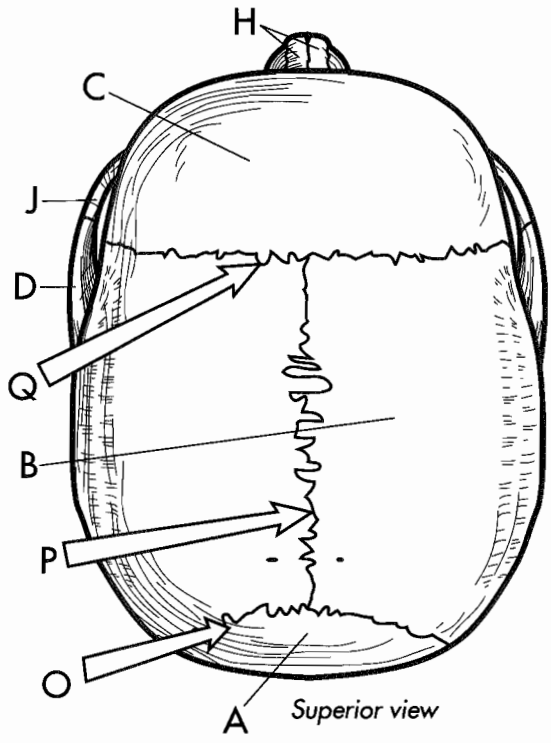
Nasal bones	H	○
Vomer bone	I	○
Zygomatic bone	J	○
Temporal process	J_1	○
Zygomatical facial foramen	J_2	○
Lacrimal bone	K	○
Squamosal suture	M	○
Mandible	N	○
Mental foramen	N_1	○
Body	N_2	○
Ramus	N_3	○
Condylar process	N_4	○
Coronoid process	N_5	○
Lambdoidal suture	O	○
Coronal suture	Q	○
Occipital mastoidal suture	R	○
Nasal concha	S	○

THE SKULL–EXTERNAL SURFACE VIEW II

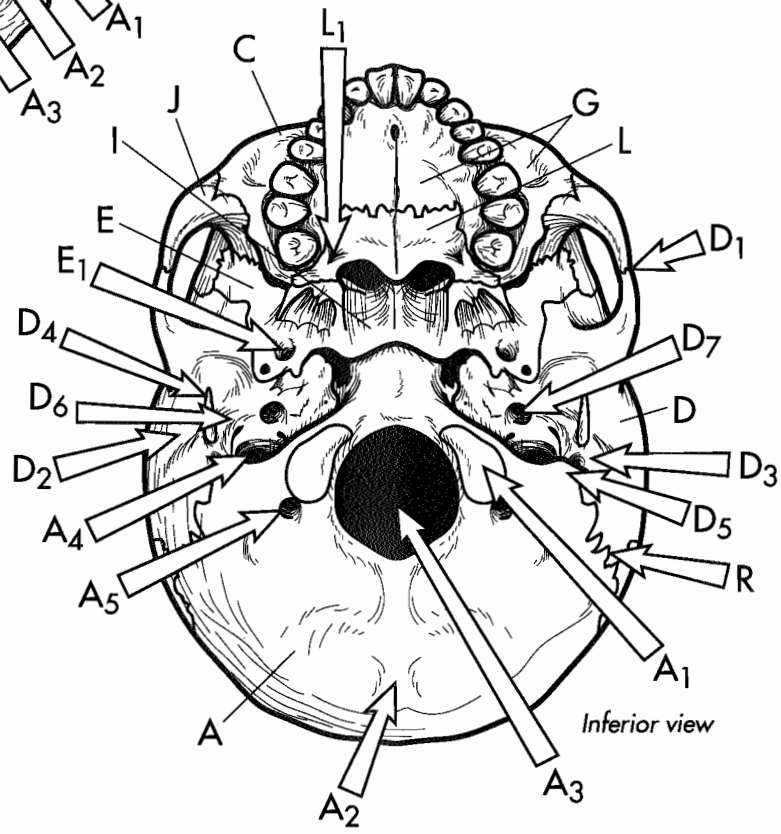
Occipital bone	A	○
Occipital condyles	A_1	○
External occipital protuberance	A_2	○
Foramen magnum	A_3	○
Lateral foramen	A_4	○
Condyloid fossa	A_5	○
Parietal bones	B	○
Frontal bone	C	○
Temporal bone	D	○
Zygomatic process	D_1	○
External auditory meatus	D_2	○
Mastoid process	D_3	○
Styloid process	D_4	○
Stylomastoid foramen	D_5	○
Mandibular fossa	D_6	○
Carotid foramen	D_7	○
Sphenoid bone	E	○
Foramen ovale	E_1	○
Maxilla	G	○
Nasal bones	H	○
Vomer bone	I	○
Zygomatic bone	J	○
Palatine bones	L	○
Occipitomastoidal foramen	L_1	○
Squamosal suture	M	○
Mandible	N	○
Lambdoidal suture	O	○
Sagittal suture	P	○
Coronal suture	Q	○
Occipitomastoidal suture	R	○



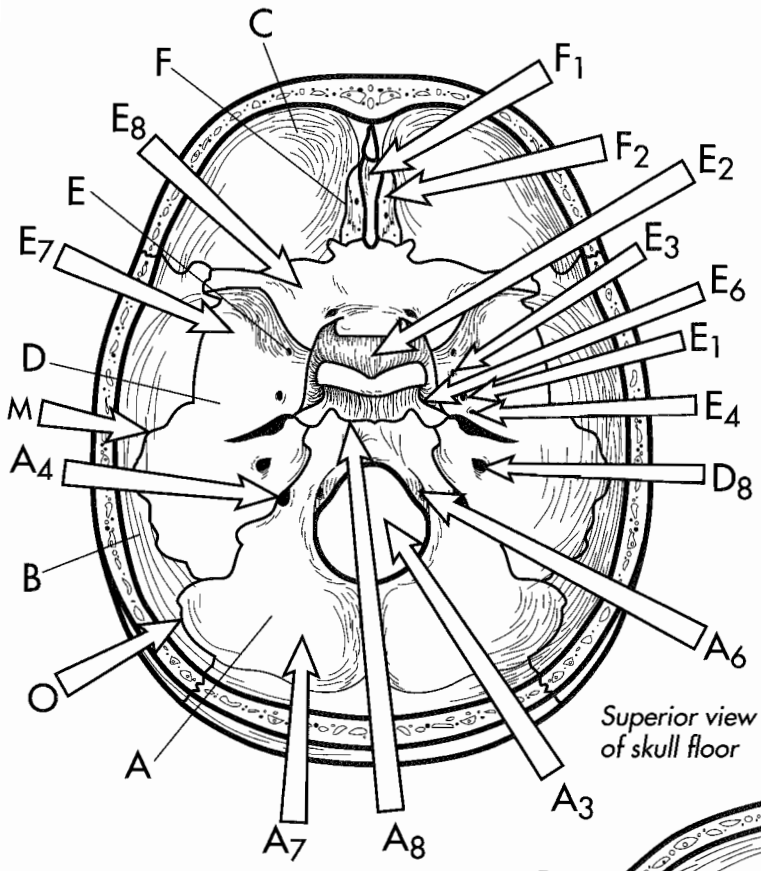
Posterior view



Superior view

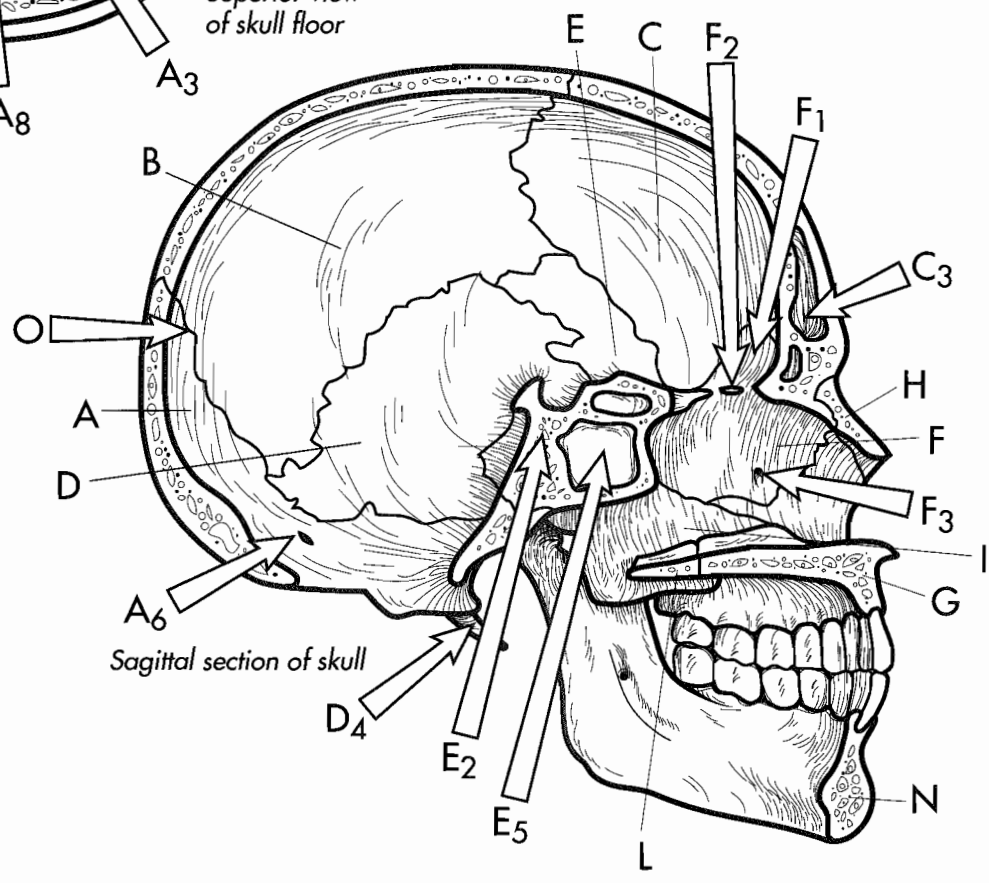


Inferior view



Superior view of skull floor

Occipital bone	A	○
Foramen magnum	A_3	○
Jugular foramen	A_4	○
Hypoglossal foramen	A_6	○
Posterior cranial fossa	A_7	○
Basioccipital band	A_8	○
Parietal bone	B	○
Frontal bone	C	○
Frontal sinus	C_3	○
Temporal bone	D	○
Styloid process	D_4	○
Internal acoustic meatus	D_8	○
Sphenoid bone	E	○
Foramen ovale	E_1	○

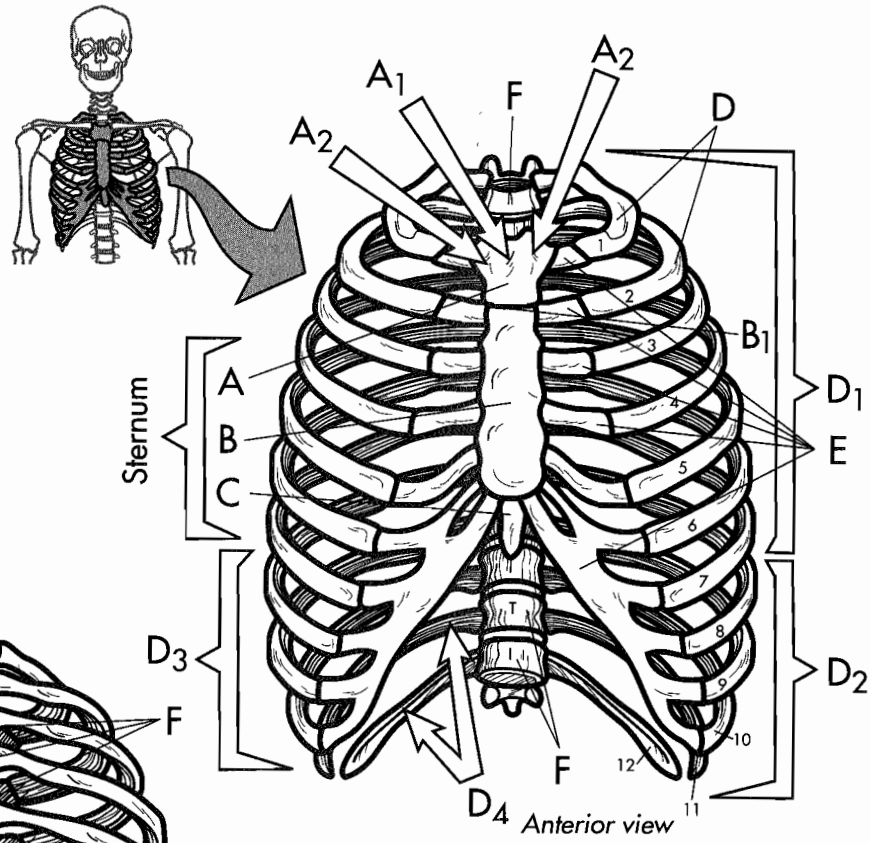


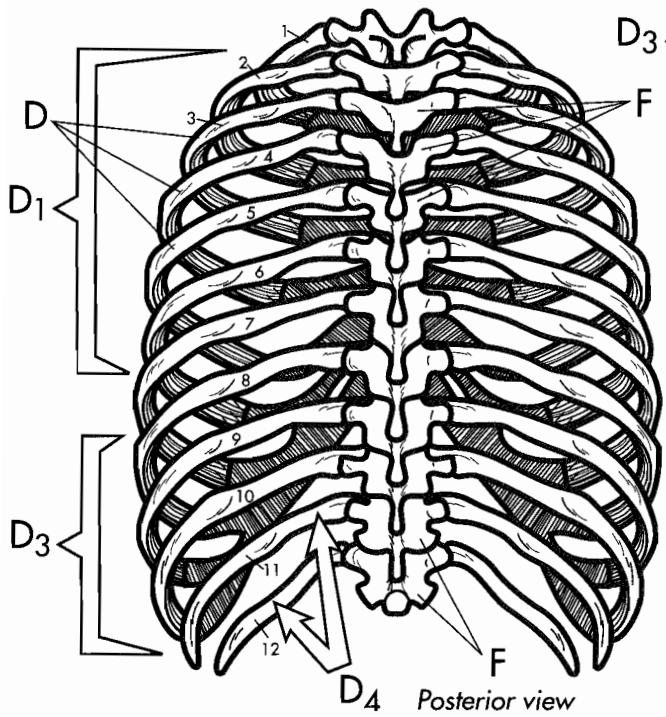
Sagittal section of skull

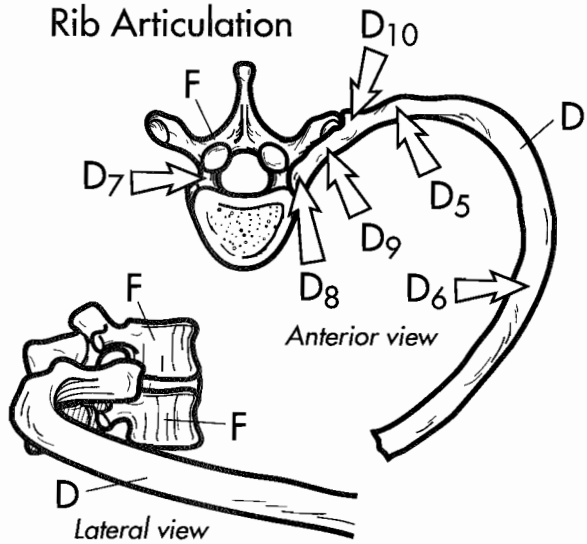
Sella turcica	E_2	○
Foramen rotundum	E_3	○
Foramen spinosum	E_4	○
Sphenoidal sinus	E_5	○
Foramen lacerum	E_6	○
Greater wings	E_7	○
Lesser wings	E_8	○
Ethmoid bone	F	○
Crista galli	F_1	○
Cribriform plates	F_2	○
Perpendicular plate	F_3	○
Maxilla	G	○
Nasal bone	H	○
Vomer bone	I	○
Palatine bone	L	○
Squamosal suture	M	○
Mandible	N	○
Lambdoidal suture	O	○

THE THORACIC CAGE AND HYOID BONE

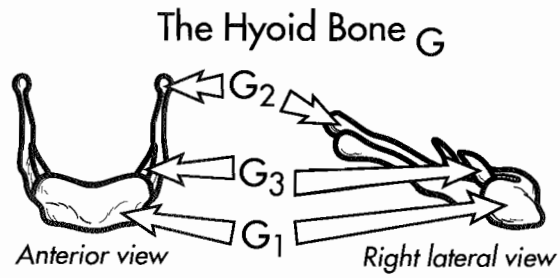
Manubrium	A	○
Jugular notch	A_1	○
Clavicular notch	A_2	○
Body	B	○
Sternal angle	B_1	○
Xiphoid process	C	○
Rib	D	○
True ribs	D_1	○
False ribs	D_2	○
Vertebrochondral ribs	D_3	○
Floating ribs	D_4	○
Concave angle	D_5	○
Shaft	D_6	○
Demifacet	D_7	○
Capitulum	D_8	○
Neck	D_9	○

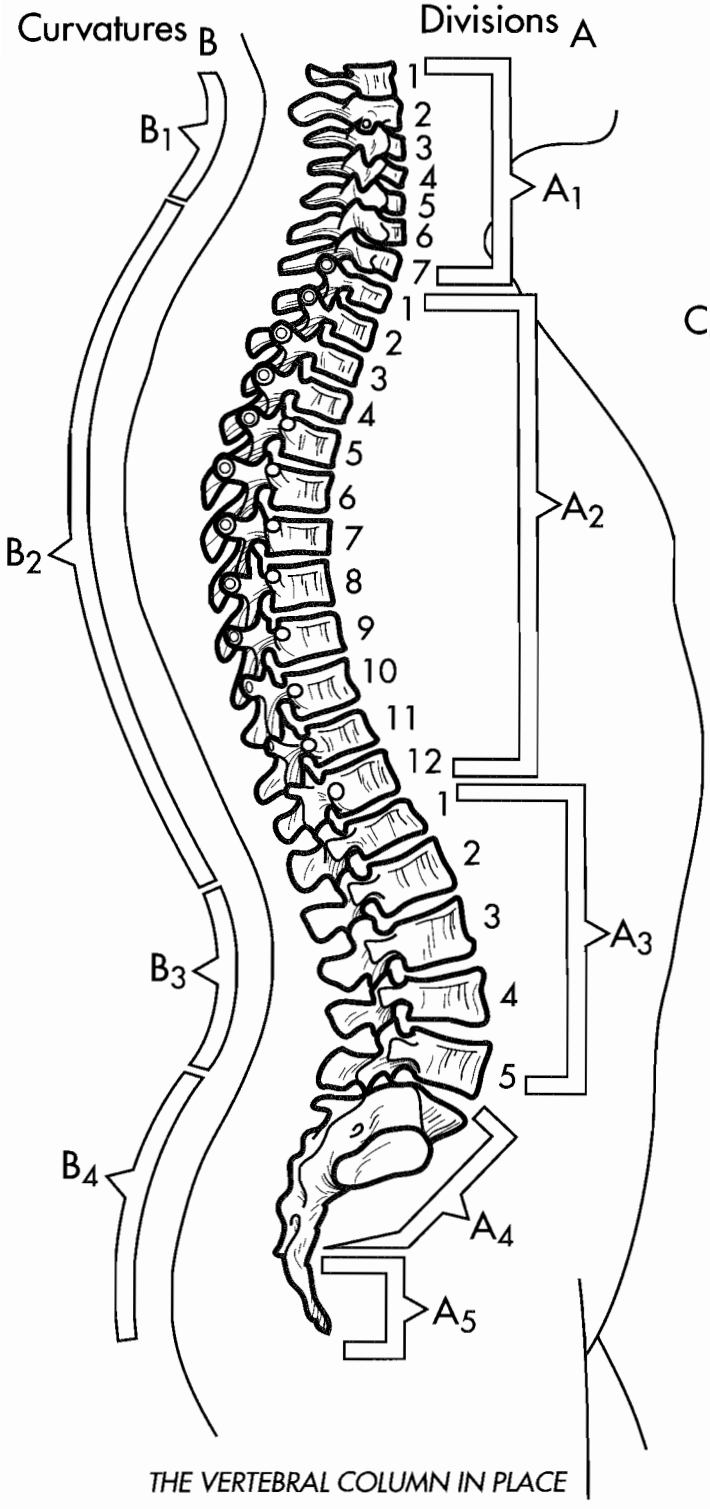






Tubercle	D_{10}	○
Costal cartilages	E	○
Vertebrae	F	○
Hyoid bone	G	○
Hyoid bone body	G_1	○
Greater horns	G_2	○
Lesser horns	G_3	○

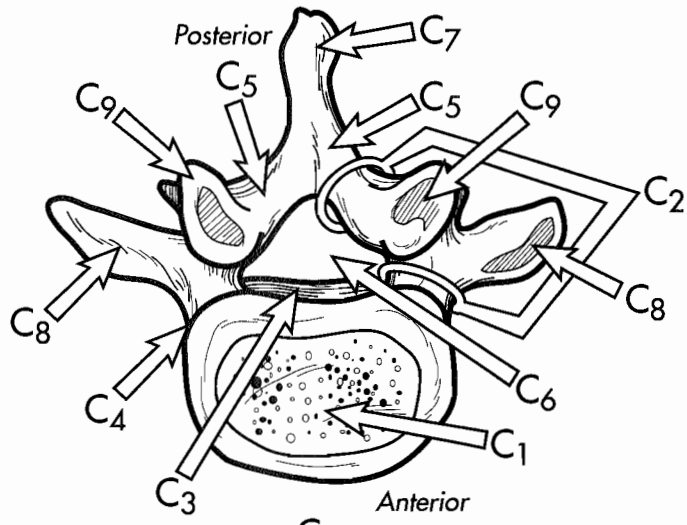


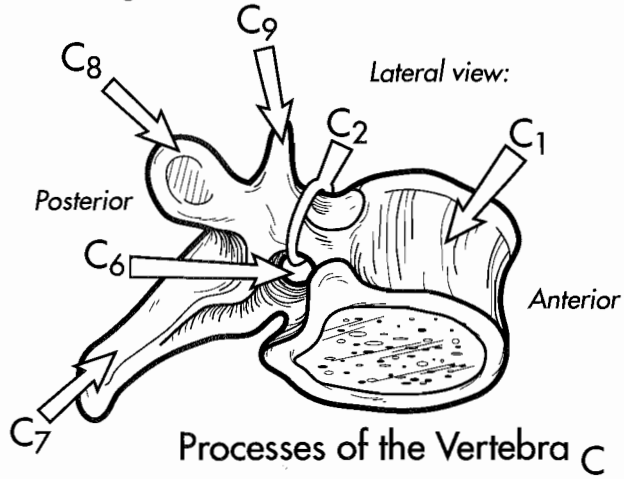


THE VERTEBRAL COLUMN IN PLACE

Five divisions	A	○
Cervical vertebrae	A_1	○
Thoracic vertebrae	A_2	○
Lumbar division	A_3	○

Superior view:

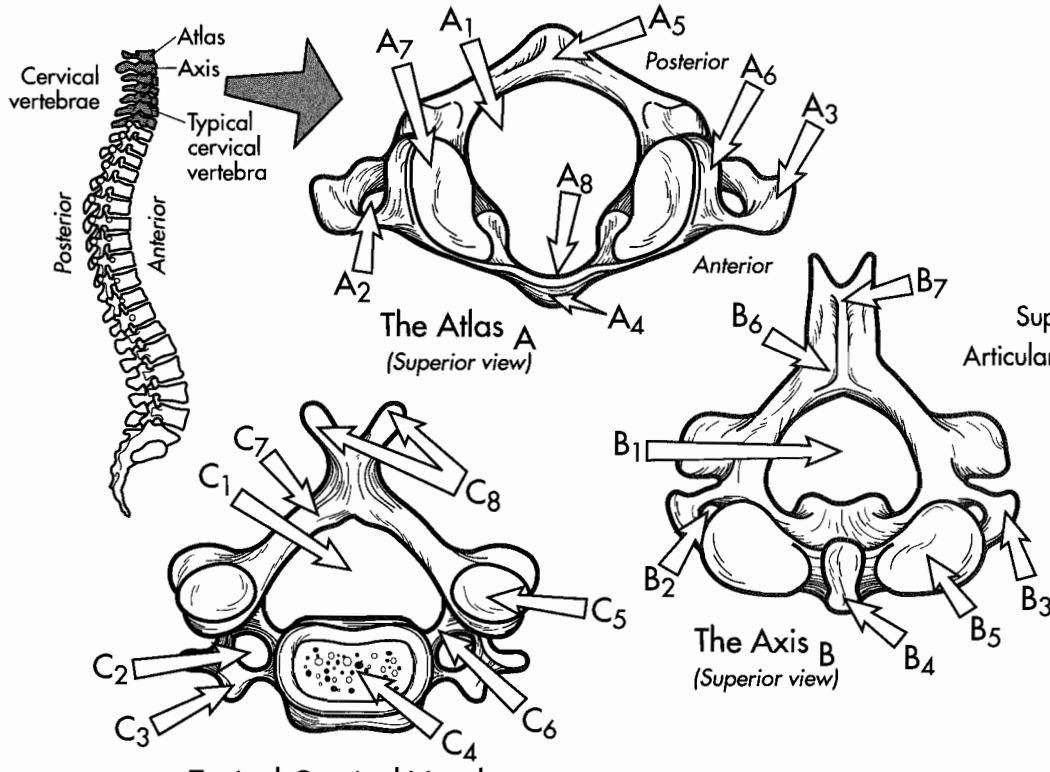




Processes of the Vertebra C

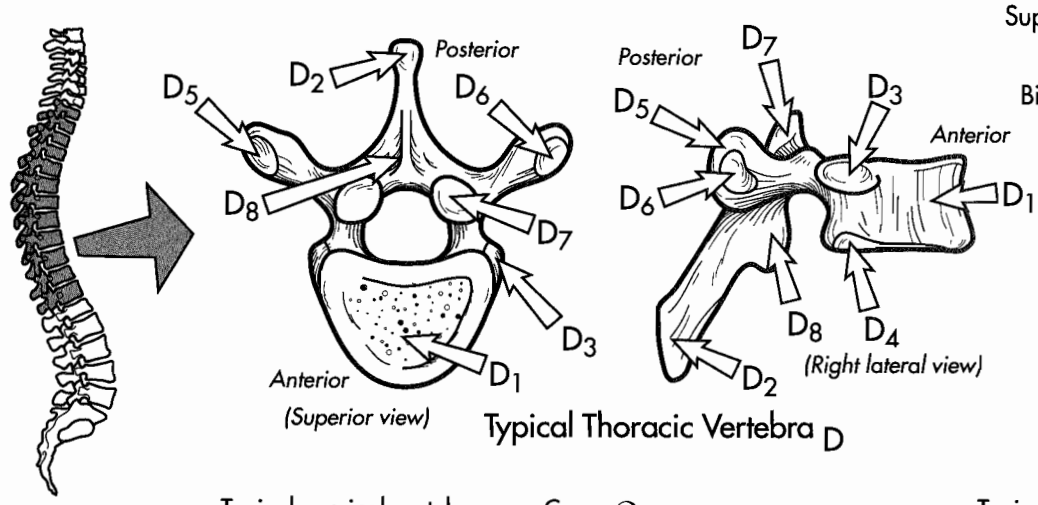
Sacral division	A_4	○
Coccygeal division	A_5	○
Four curvatures	B	○
Cervical curvature	B_1	○
Thoracic curvature	B_2	○
Lumbar curvature	B_3	○
Sacral curvature	B_4	○
Processes of the vertabra	C	○
Body (centrum)	C_1	○
Vertebral arch	C_2	○
Floor	C_3	○
Pedicles	C_4	○
Laminae	C_5	○
Vertebral foramen	C_6	○
Spinous process	C_7	○
Transverse process	C_8	○
Superior articular process	C_9	○

THE CERVICAL AND THORACIC VERTEBRAE



Atlas	A	○
Vertebral foramen	A_1	○
Transverse foramen	A_2	○
Transverse process	A_3	○
Anterior arch	A_4	○
Posterior arch	A_5	○
Lateral mass	A_6	○
Superior articular facet	A_7	○
Articular surface for the dens	A_8	○

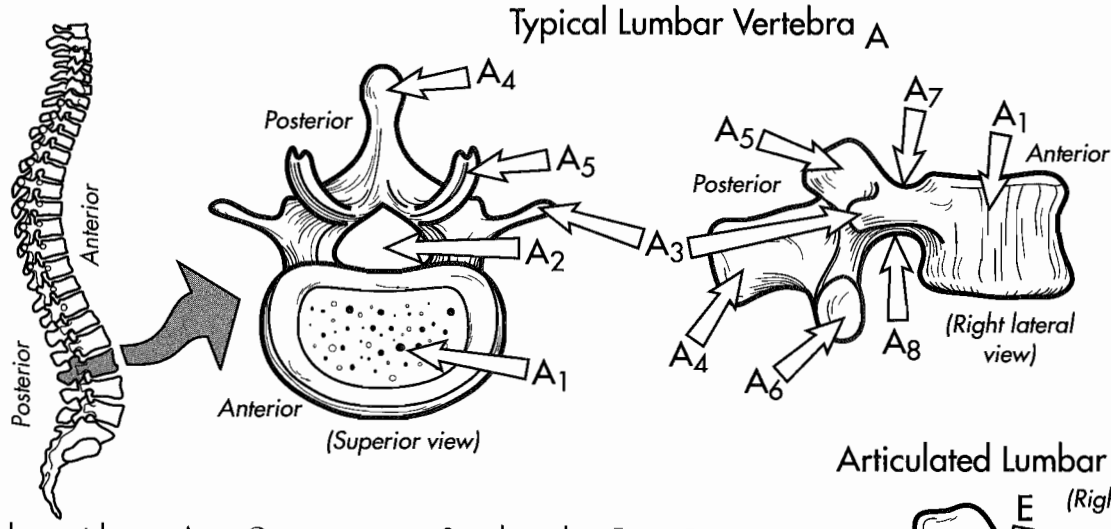
Axis	B	○
Vertebral foramen	B_1	○
Transverse foramina	B_2	○
Transverse process	B_3	○
Dens (odontoid process)	B_4	○
Superior articular facet	B_5	○
Lamina	B_6	○
Bifed spinous process	B_7	○



Typical cervical vertebra	C	○
Vertebral foramen	C_1	○
Transverse foramina	C_2	○
Transverse process	C_3	○
Body (centrum)	C_4	○
Superior articular facets	C_5	○
Pedicle	C_6	○
Lamina	C_7	○
Spinous process	C_8	○

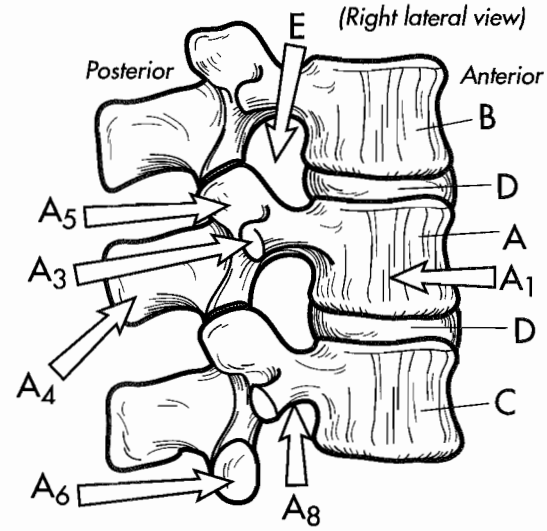
Typical thoracic vertebra	D	○
Body	D_1	○
Spinous process	D_2	○
Superior demifacet	D_3	○
Inferior demifacet	D_4	○
Transverse process	D_5	○
Transverse costal facet	D_6	○
Superior articular facet	D_7	○
Prominent lamina	D_8	○

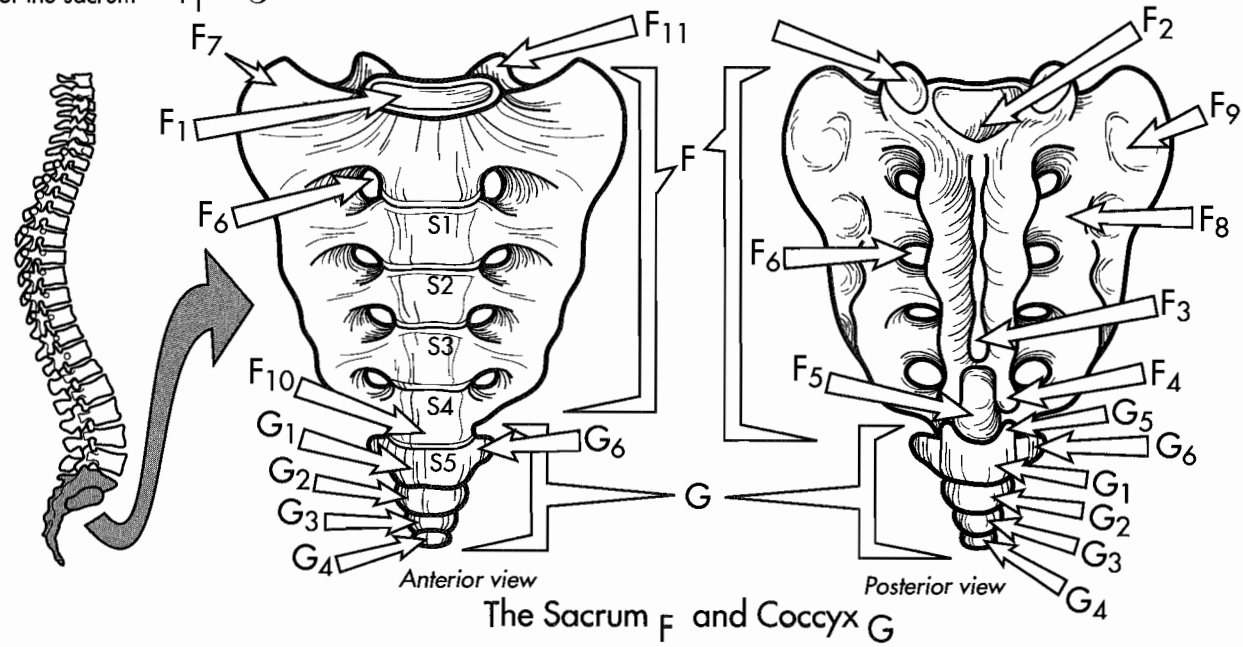
Typical Lumbar Vertebra A



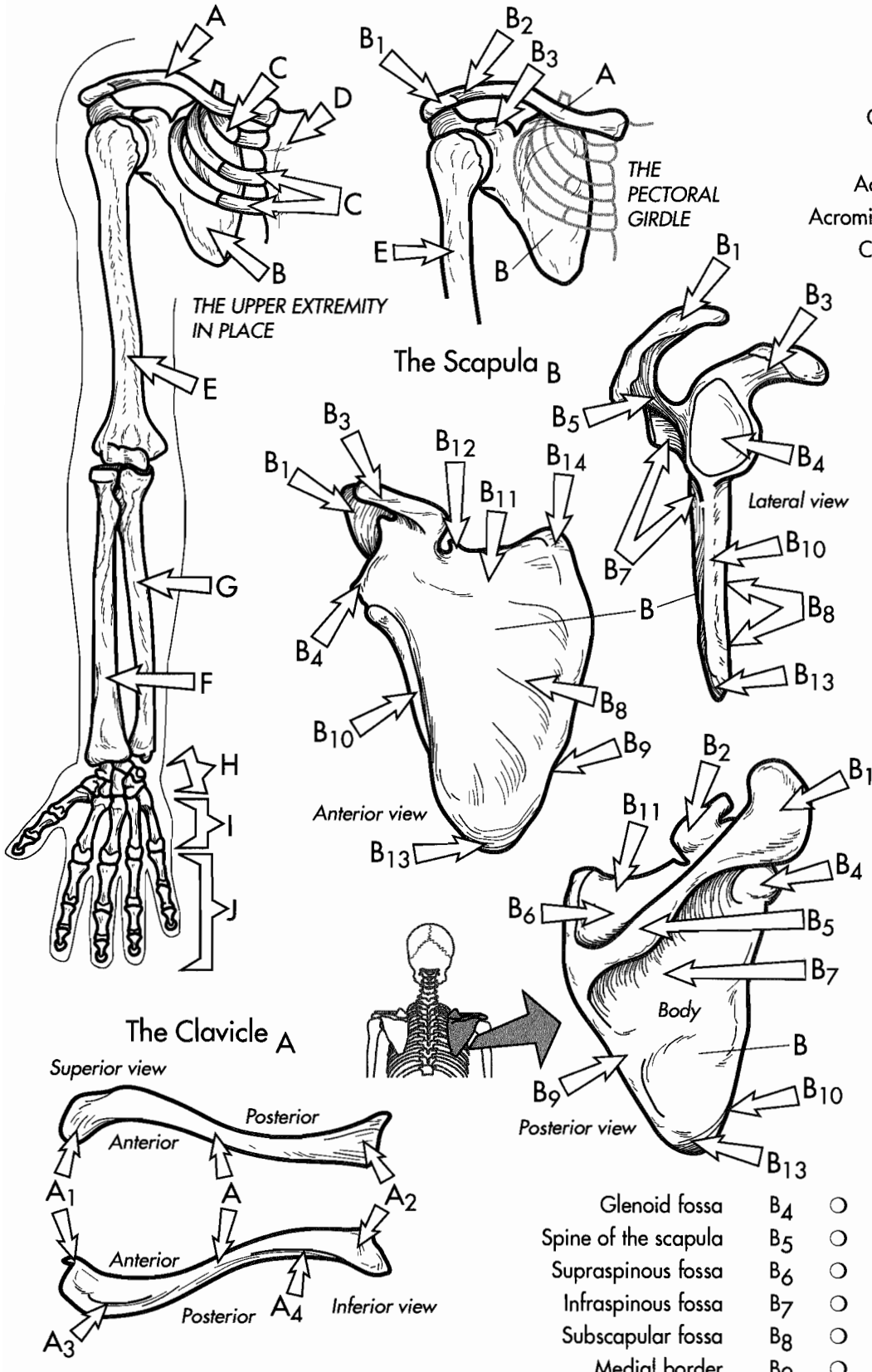
Typical lumbar vertebra	A	○
Body	A_1	○
Vertebral foramen	A_2	○
Transverse processes	A_3	○
Spinous process	A_4	○
Superior articular facets	A_5	○
Inferior articular facets	A_6	○
Superior vertebral notch	A_7	○
Inferior vertebral notch	A_8	○
Superior vertebra	B	○
Inferior vertebra	C	○
Intervertebral disk	D	○
Intervertebral foramen	E	○
Sacrum	F	○
Base of the sacrum	F_1	○
Sacral canal	F_2	○
Median sacral crest	F_3	○
Sacral cornua	F_4	○
Sacral hiatus	F_5	○
Sacral foramen	F_6	○
Ala	F_7	○
Lateral sacral crest	F_8	○
Sacral tuberosity	F_9	○
Apex	F_{10}	○
Articular processes and facets	F_{11}	○
Coccyx	G	○
Coccygeal vertebrae	G_{1-4}	○
Coccygeal cornua	G_5	○
Transverse processes	G_6	○

Articulated Lumbar Vertebrae

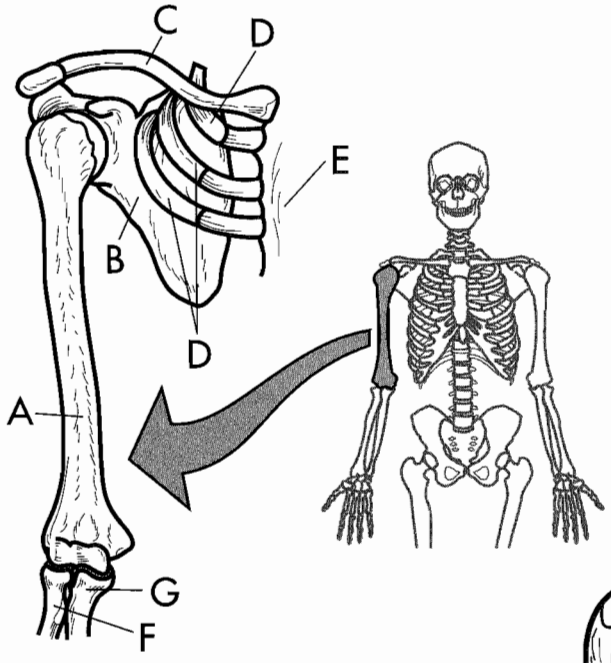




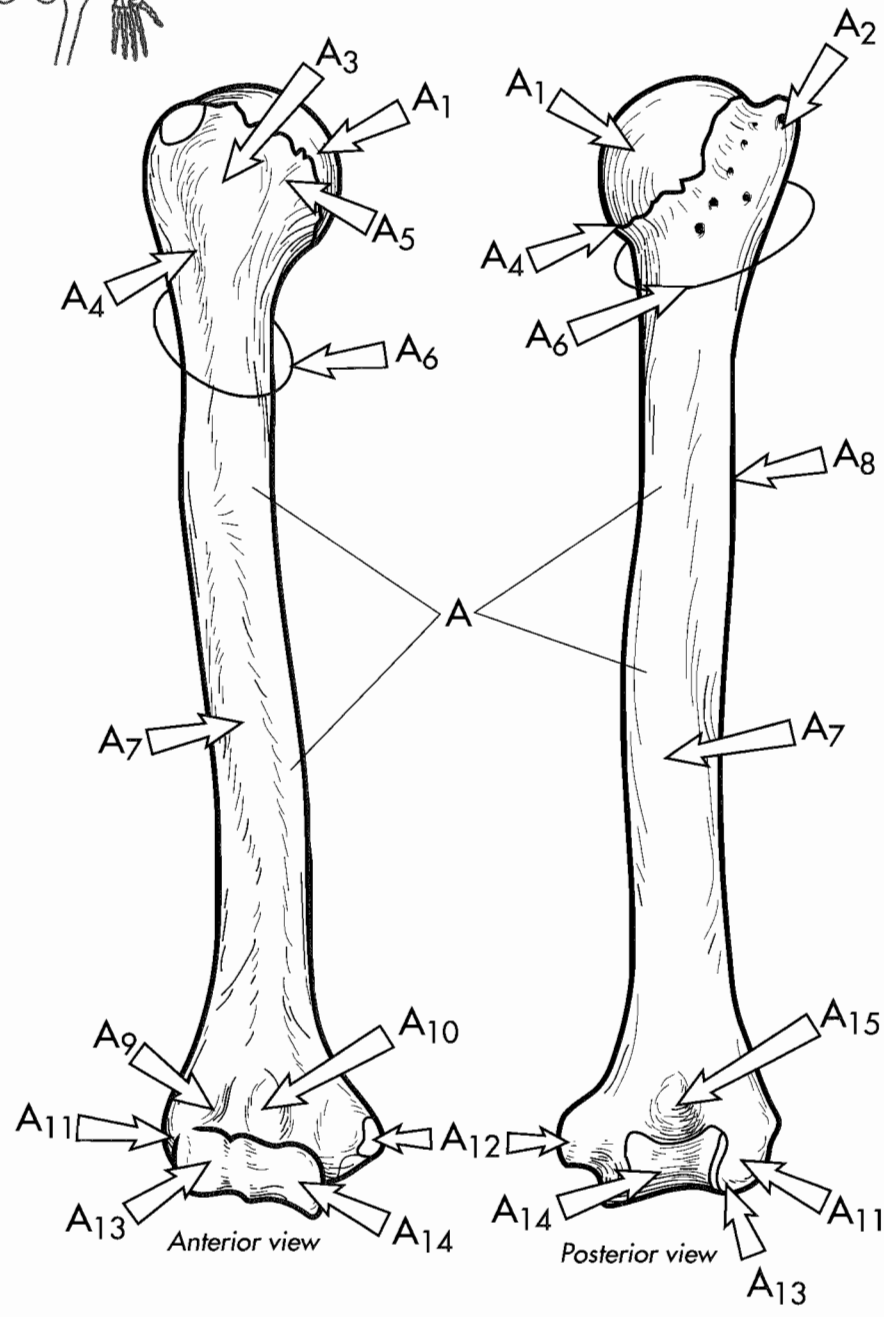
The Sacrum F and Coccyx G

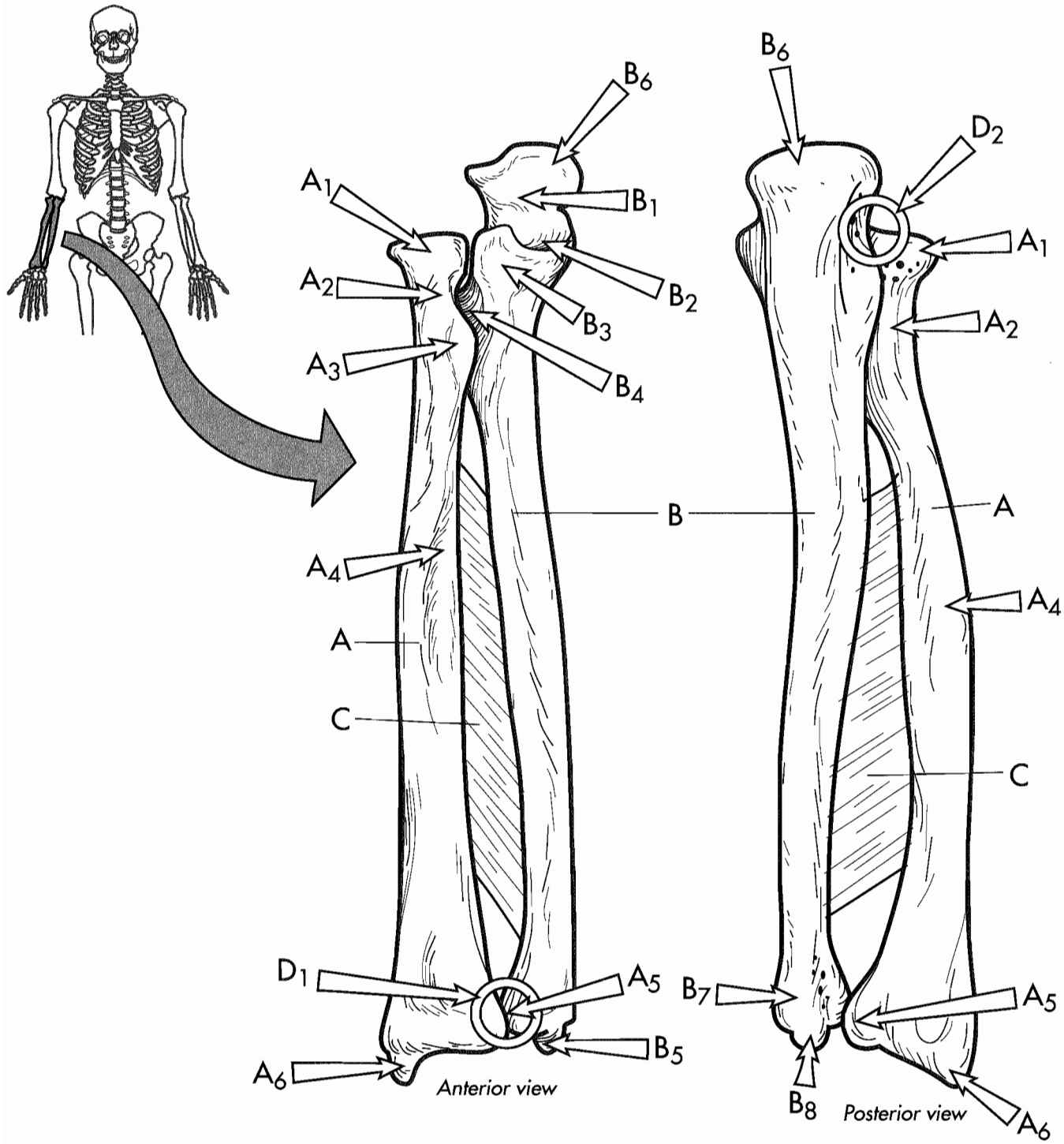


Clavicle	A	○
Acromial end	A_1	○
Sternal end	A_2	○
Conoid tubercle	A_3	○
Costal tuberosity	A_4	○
Scapula	B	○
Acromion process	B_1	○
Acromioclavicular joint	B_2	○
Coracoid process	B_3	○
Glenoid fossa	B_4	○
Spine of the scapula	B_5	○
Supraspinous fossa	B_6	○
Infraspinous fossa	B_7	○
Subscapular fossa	B_8	○
Medial border	B_9	○
Lateral (axillary) border	B_{10}	○
Superior border	B_{11}	○
Scapular notch	B_{12}	○
Inferior angle	B_{13}	○
Superior angle	B_{14}	○
Ribs	C	○
Sternum	D	○
Humerus	E	○
Radius	F	○
Ulna	G	○
Carpal bones	H	○
Metacarpals	I	○
Phalanges	J	○

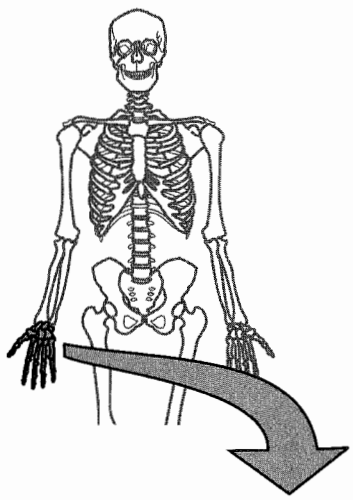


Humerus	A	❍
Head	A_1	❍
Greater tubercle	A_2	❍
Lesser tubercle	A_3	❍
Intertubercular groove	A_4	❍
Anatomical neck	A_5	❍
Surgical neck	A_6	❍
Shaft of the humerus	A_7	❍
Deltoid tuberosity	A_8	❍
Radial fossa	A_9	❍
Coronoid fossa	A_{10}	❍
Lateral epicondyle	A_{11}	❍
Medial epicondyle	A_{12}	❍
Capitulum	A_{13}	❍
Trochlea	A_{14}	❍
Olecranon fossa	A_{15}	❍
Scapula	B	❍
Clavicle	C	❍
Ribs	D	❍
Sternum	E	❍
Radius	F	❍
Ulna	G	❍

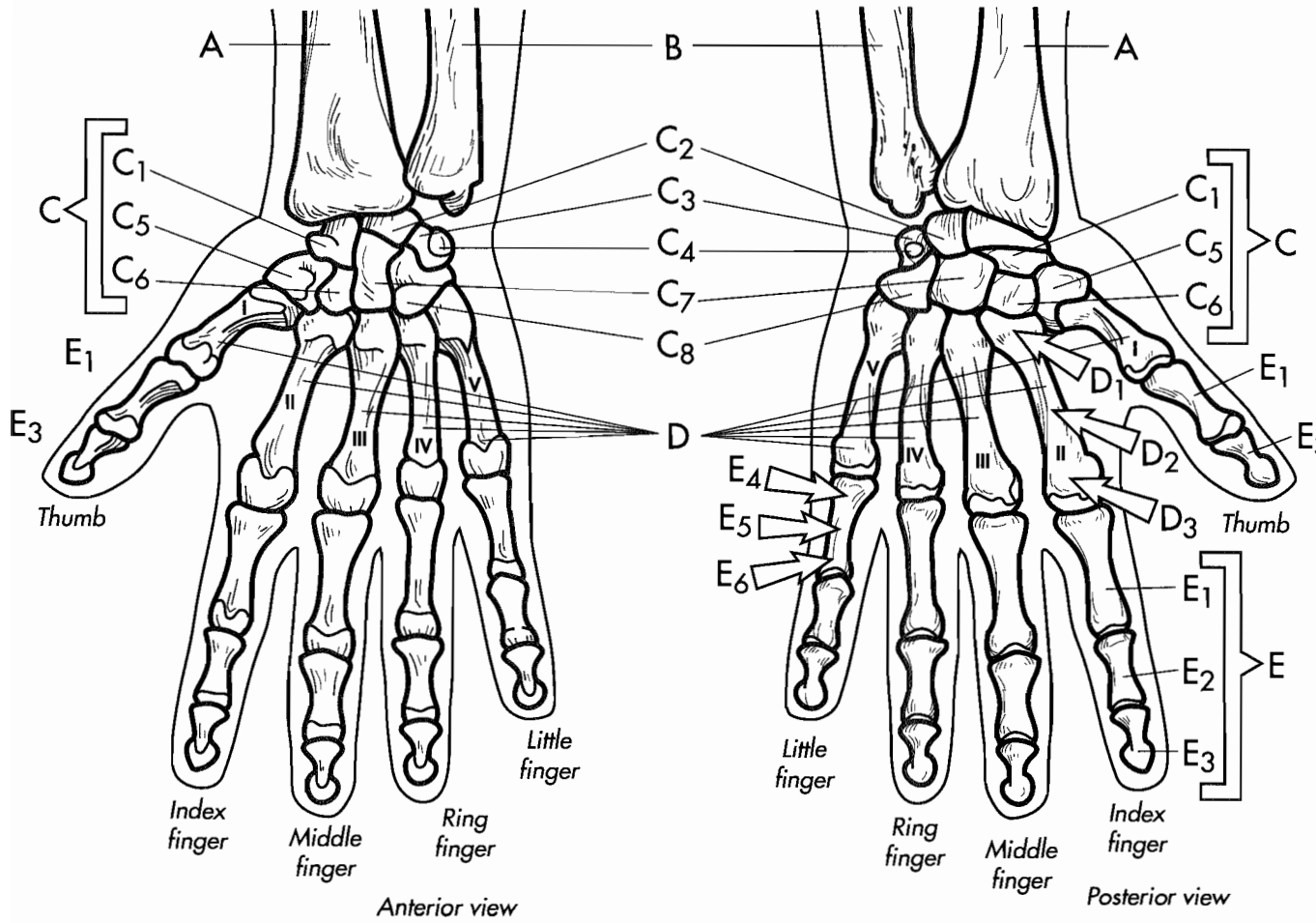


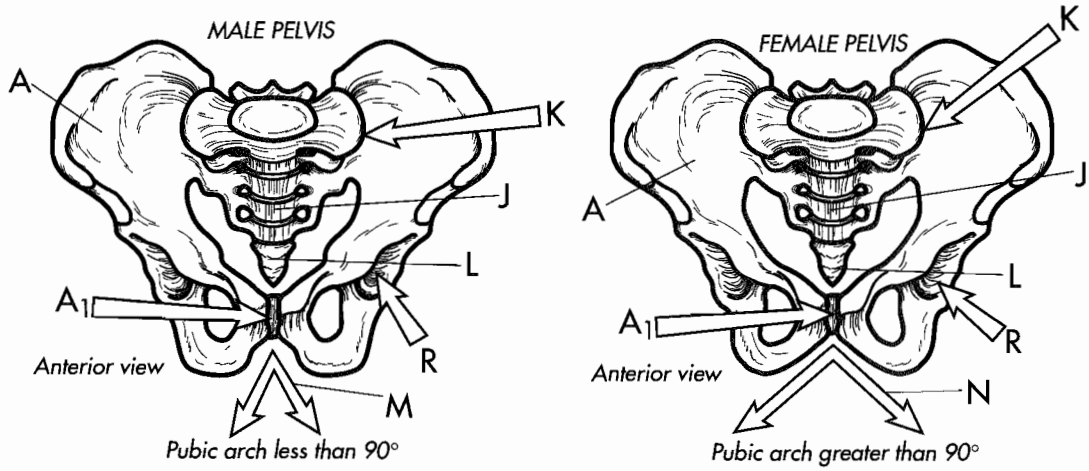


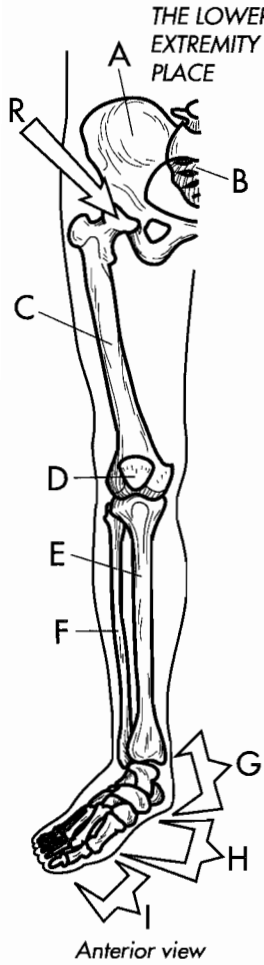
Radius	A	○	Ulna	B	○			
Head of the radius	A_1	○	Trochlear notch	B_1	○			
Neck of the radius	A_2	○	Coronoid process	B_2	○	Head of ulna	B_7	○
Radial tuberosity	A_3	○	Ulnar tuberosity	B_3	○	Articular cartilage	B_8	○
Shaft	A_4	○	Radial notch	B_4	○	Interosseus membrane	C	○
Ulnar notch	A_5	○	Short styloid process	B_5	○	Distal radial-ulnar joint	D_1	○
Styloid process	A_6	○	Olecranon process	B_6	○	Proximal radial-ulnar joint	D_2	○

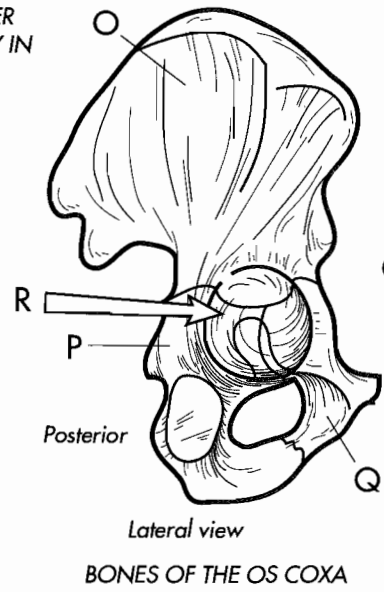


Radius	A	○	Base of the metacarpal	D_1	○
Ulna	B	○	Shaft of the metacarpal	D_2	○
Carpals	C	○	Head of the metacarpal	D_3	○
Scaphoid bone	C_1	○	Phalanges	E	○
Lunate bone	C_2	○	Proximal phalanx	E_1	○
Triquetal bone	C_3	○	Middle phalanx	E_2	○
Pisiform bone	C_4	○	Distal phalanx	E_3	○
Trapezium bone	C_5	○	Base of the phalanx	E_4	○
Trapezoid bone	C_6	○	Shaft of the phalanx	E_5	○
Capitate bone	C_7	○	Head of the phalanx	E_6	○
Hamate bone	C_8	○			
Metacarpals	D	○			

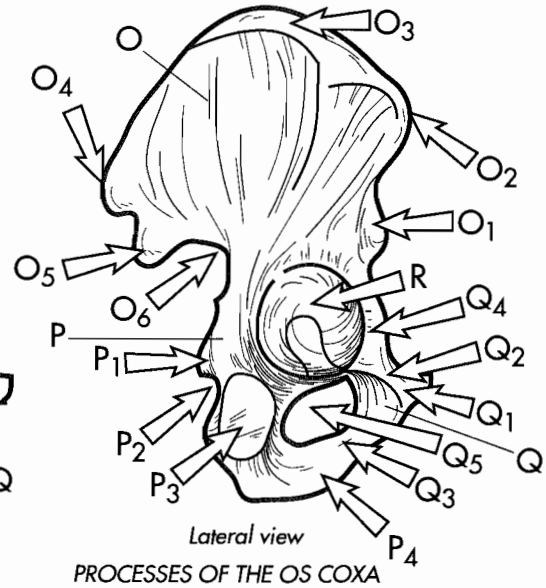








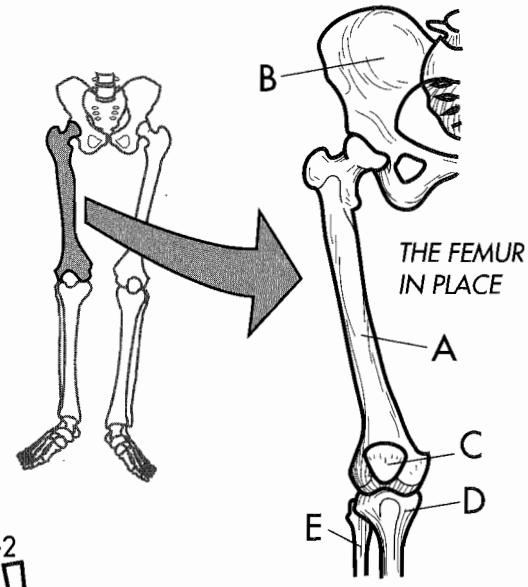
BONES OF THE OS COXA

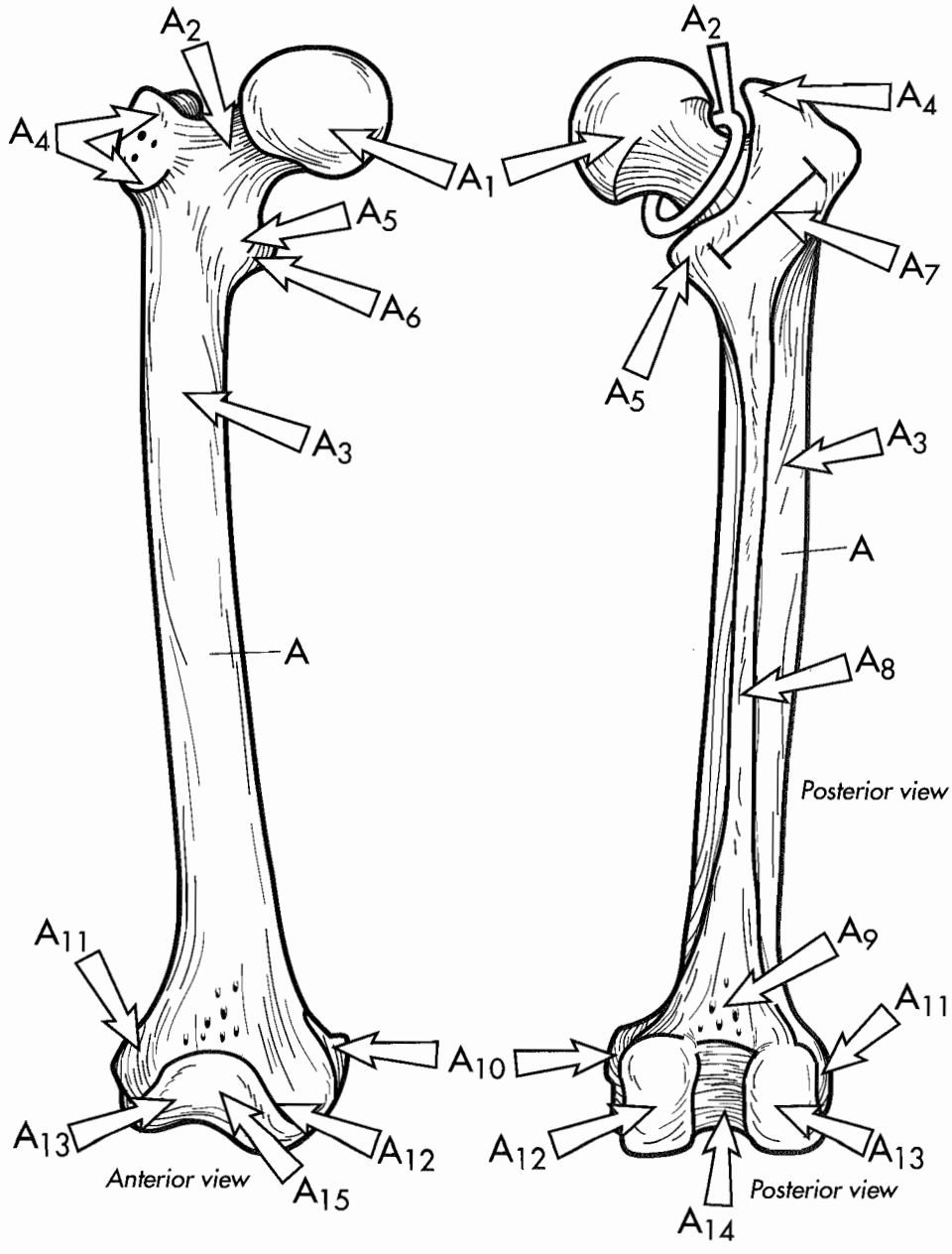


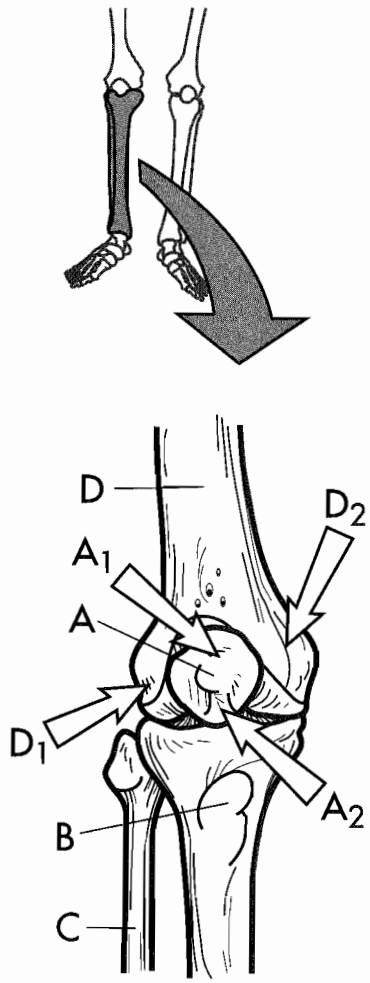
PROCESSES OF THE OS COXA

Pelvic bone	A	❍	Anterior superior iliac spine	O_2	❍
Pubic symphysis	A_1	❍	Iliac crest	O_3	❍
Sacrum	B	❍	Posterior superior iliac spine	O_4	❍
Femur	C	❍	Posterior inferior iliac spine	O_5	❍
Patella	D	❍	Greater sciatic notch	O_6	❍
Tibia	E	❍	Ischium	P	❍
Fibula	F	❍	Ischial spine	P_1	❍
Tarsals	G	❍	Lesser sciatic notch	P_2	❍
Metatarsals	H	❍	Ischial tuberosity	P_3	❍
Phalanges	I	❍	Ramus of the ischium	P_4	❍
Sacrum	J	❍	Pubis	Q	❍
Sacroiliac joint	K	❍	Pubic tubercle	Q_1	❍
Coccyx	L	❍	Superior ramus	Q_2	❍
Male pubic arch	M	❍	Inferior ramus	Q_3	❍
Female pubic arch	N	❍	Body of the pubis	Q_4	❍
Ilium	O	❍	Obturator foramen	Q_5	❍
Anterior inferior iliac spine	O_1	❍	Acetabulum	R	❍

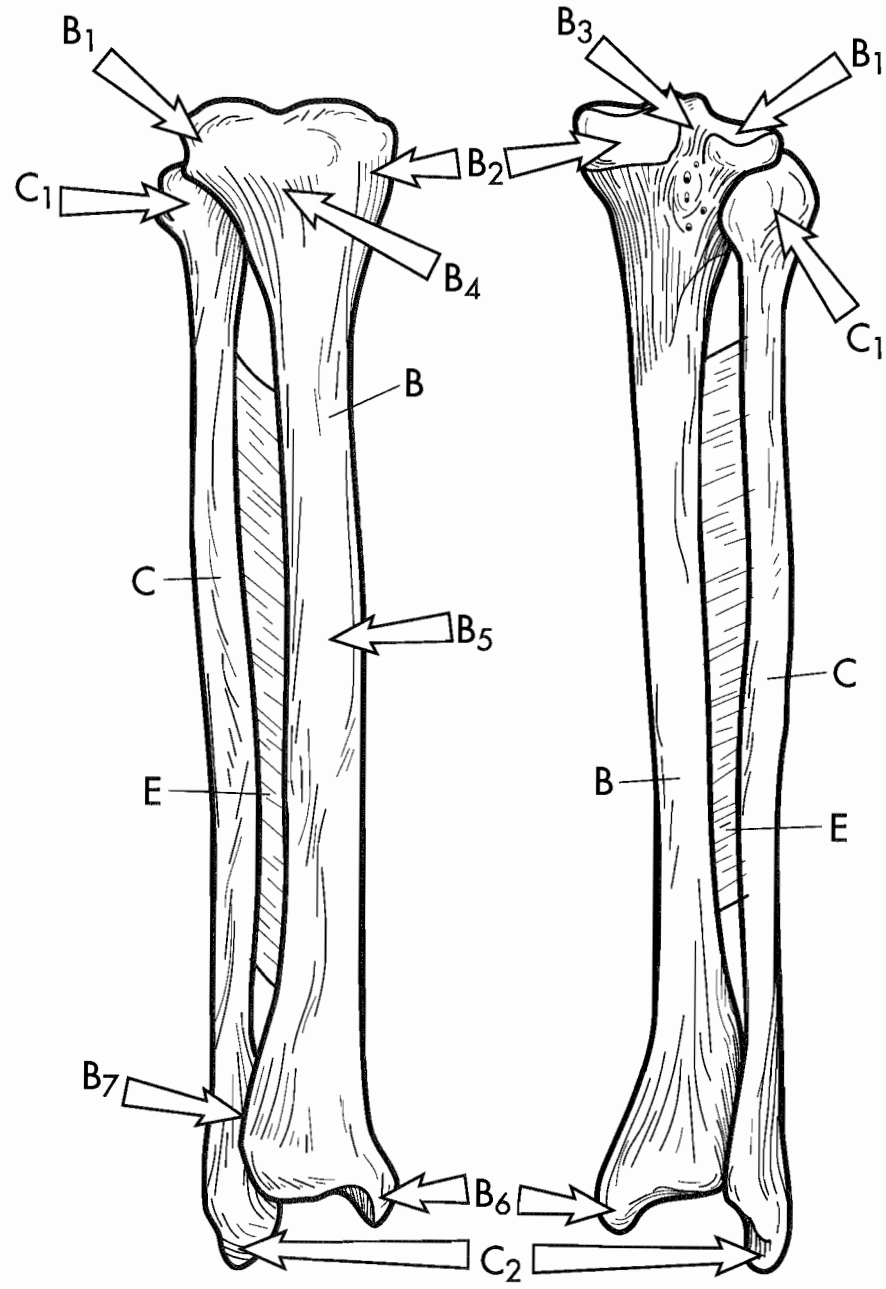
Femur	A	○	Medial epicondyle	A_{10}	○
Head of femur	A_1	○	Lateral epicondyle	A_{11}	○
Neck of femur	A_2	○	Medial condyle	A_{12}	○
Shaft of femur	A_3	○	Lateral condyle	A_{13}	○
Greater trochanter	A_4	○	Intercondylar fossa	A_{14}	○
Lesser trochanter	A_5	○	Patellar space surface	A_{15}	○
Intertrochanteric line	A_6	○	Pelvic girdle	B	○
Intertrochanteric crest	A_7	○	Patella	C	○
Linea aspera	A_8	○	Tibia	D	○
Popliteal surface	A_9	○	Fibula	E	○







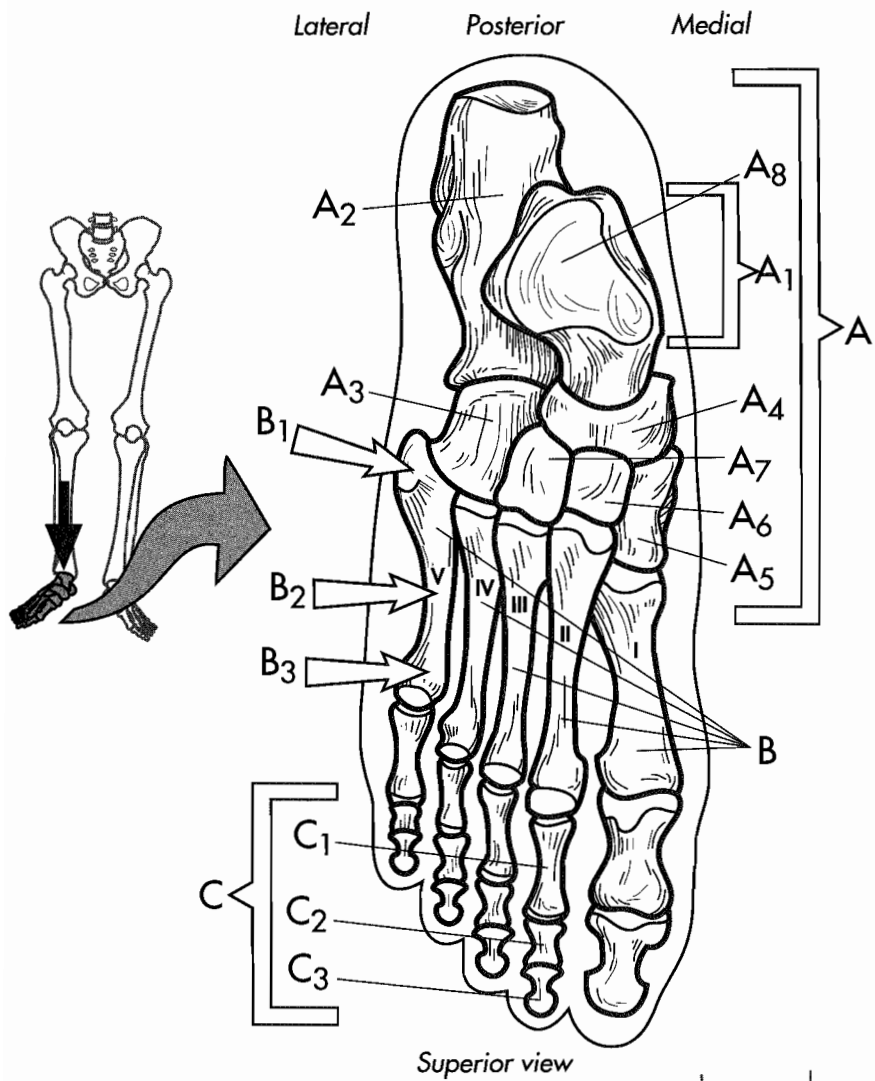
Anterior view
THE PATELLA IN PLACE



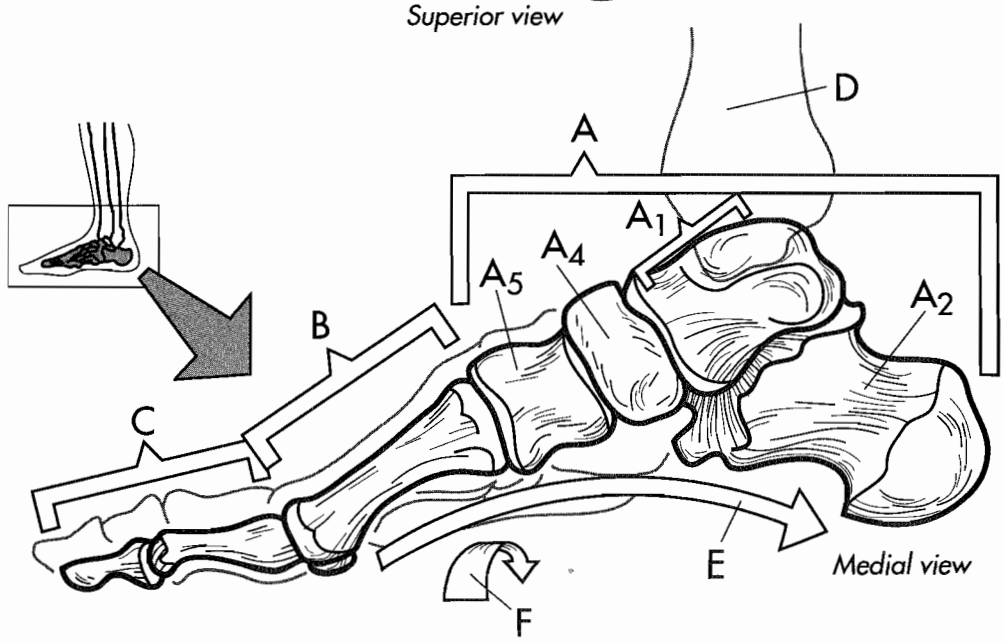
Anterior view *Posterior view*

Patella	A	❍
Base	A_1	❍
Apex	A_2	❍
Tibia	B	❍
Lateral condyle of tibia	B_1	❍
Medial condyle of tibia	B_2	❍
Intercondylar eminence	B_3	❍
Tibial tuberosity	B_4	❍
Anterior crest	B_5	❍
Medial malleolus	B_6	❍

Fibula Notch	B_7	❍
Fibula	C	❍
Head of fibula	C_1	❍
Lateral malleolus	C_2	❍
Femur	D	❍
Lateral epicondyle of femur	D_1	❍
Medial epicondyle of femur	D_2	❍
Interosseus membrane	E	❍



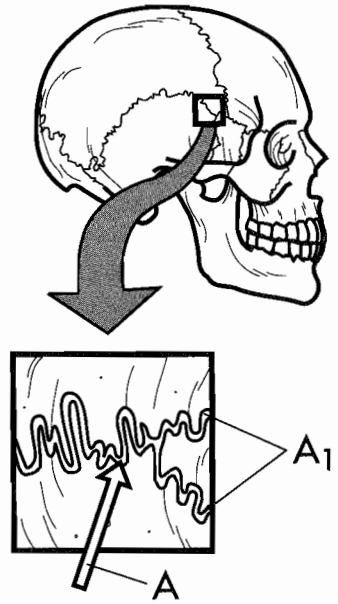
Superior view

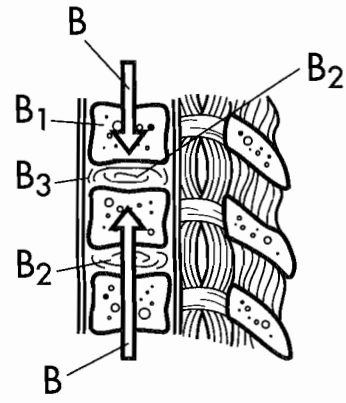


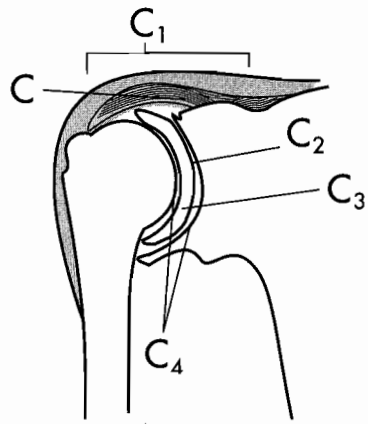
Medial view

Tarsals	A	○
Talus	A_1	○
Calcaneus	A_2	○
Cuboid	A_3	○
Navicular	A_4	○
Medial cuneiform	A_5	○
Intermediate cuneiform	A_6	○
Lateral cuneiform	A_7	○
Trochlea	A_8	○
Metatarsals	B	○
Base	B_1	○
Shaft	B_2	○
Head	B_3	○
Phalanges	C	○
Proximal phalanges	C_1	○
Middle phalanges	C_2	○
Distal phalanges	C_3	○
Tibia	D	○
Longitudinal arch	E	○
Transverse arch	F	○

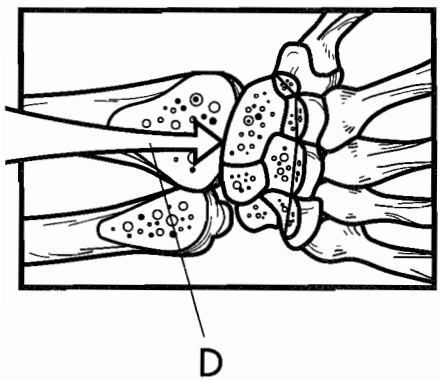
CATEGORIES OF JOINTS

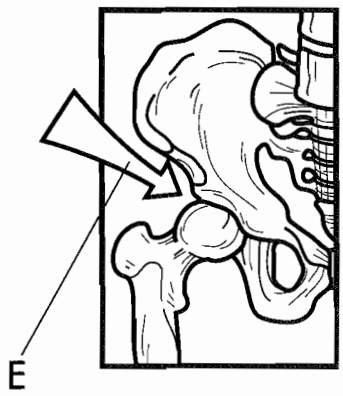


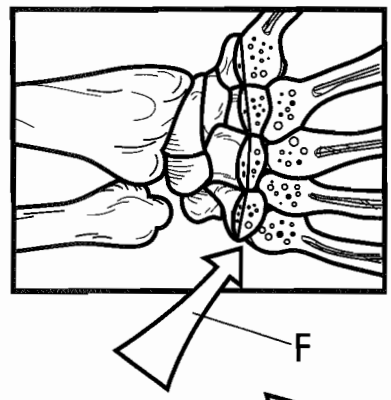


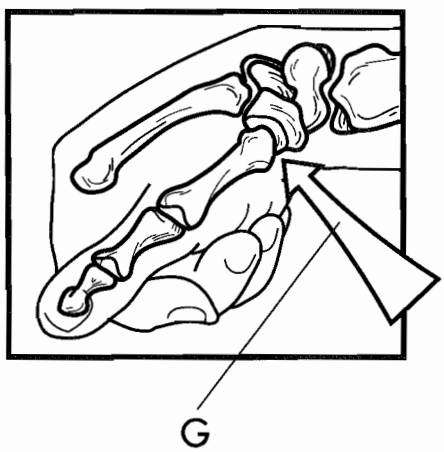


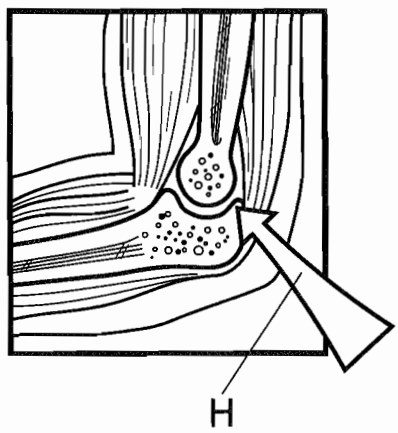
TYPES OF DIARTHROSES

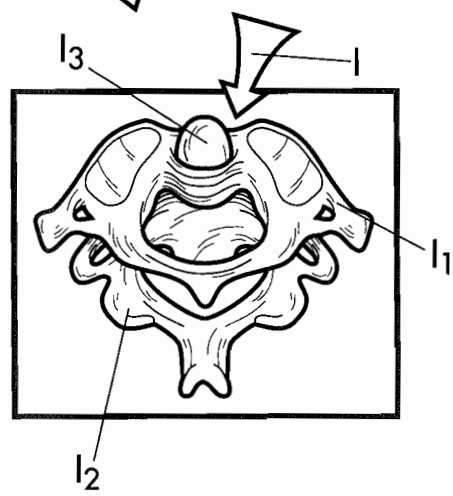




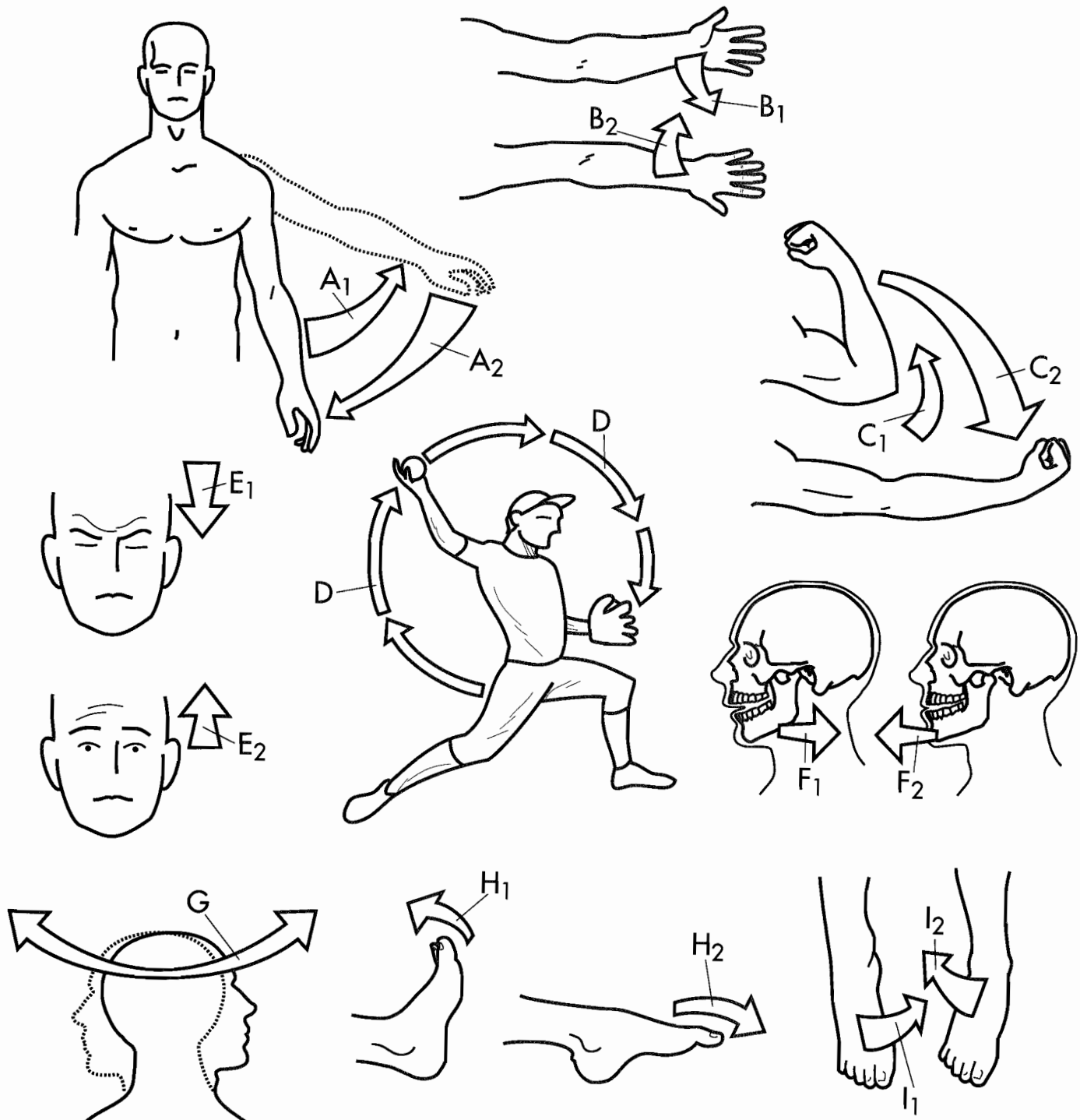








Synarthrosis	A	○	Fibrous joint capsule	C_1	○	Saddle joint	G	○
Fibrocartilage	A_1	○	Synovial membrane	C_2	○	Hinge joint	H	○
Amphiarthrosis	B	○	Synovial fluid	C_3	○	Pivot joint	I	○
Vertebrae	B_1	○	Articular cartilages	C_4	○	Atlas	I_1	○
Invertebral disk	B_2	○	Condyloid joint	D	○	Axis	I_2	○
Fibrocartilage	B_3	○	Ball-and-socket joint	E	○	Odontoid process	I_3	○
Diarthrosis	C	○	Gliding joint	F	○			



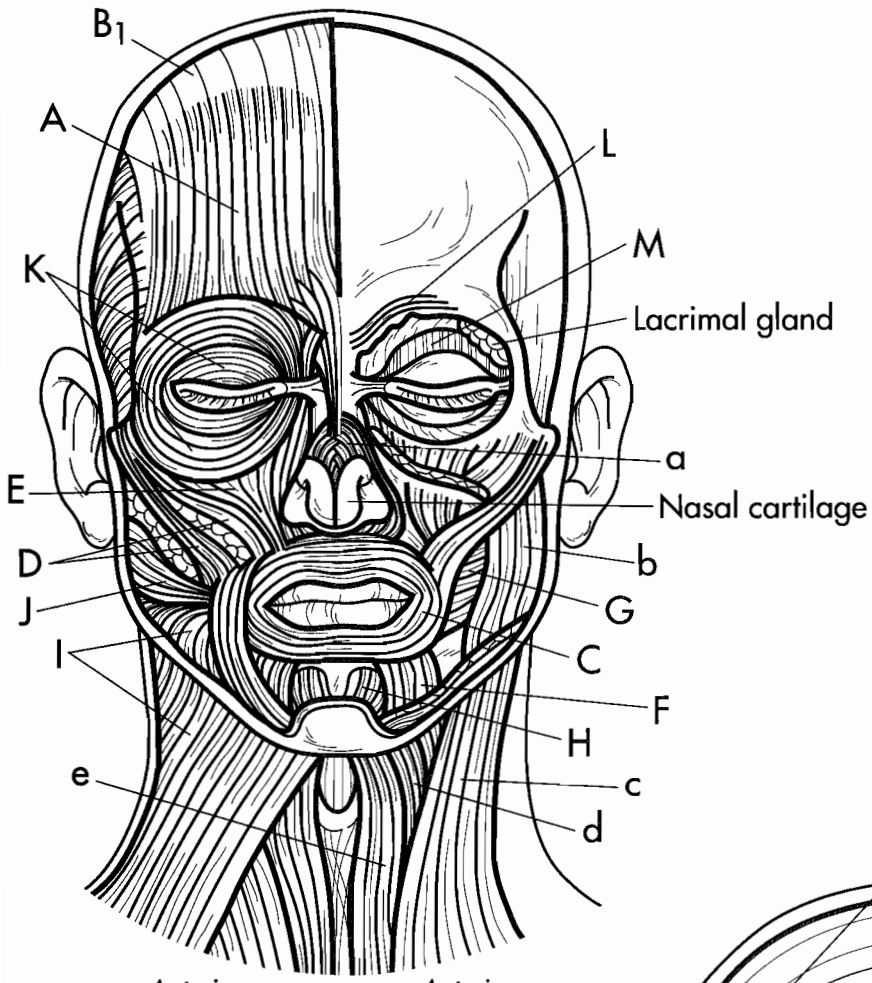
Abduction	A_1	○
Adduction	A_2	○
Pronation	B_1	○
Supination	B_2	○
Flexion	C_1	○
Extension	C_2	○

Circumduction	D	○
Depression	E_1	○
Elevation	E_2	○
Retraction	F_1	○
Protraction	F_2	○
Rotation	G	○

Dorsiflexion	H_1	○
Plantar flexion	H_2	○
Inversion	I_1	○
Eversion	I_2	○

CHAPTER FOUR:

the MUSCULAR SYSTEM

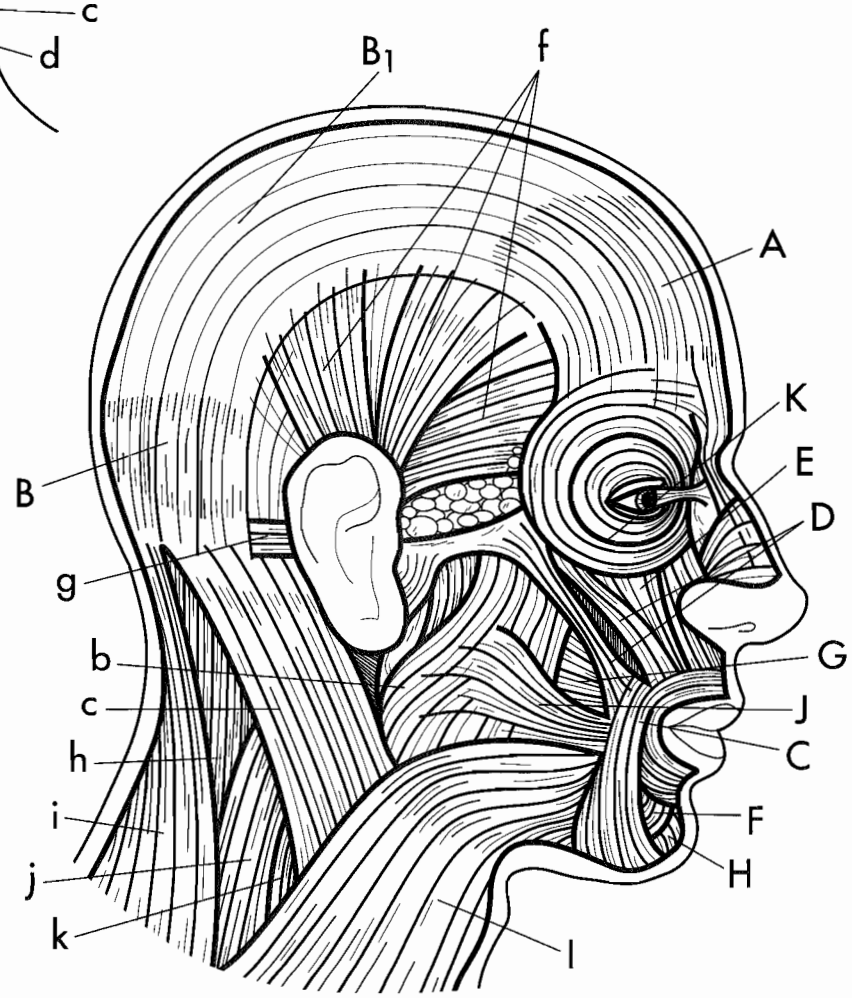


Anterior superficial view

Anterior deep view

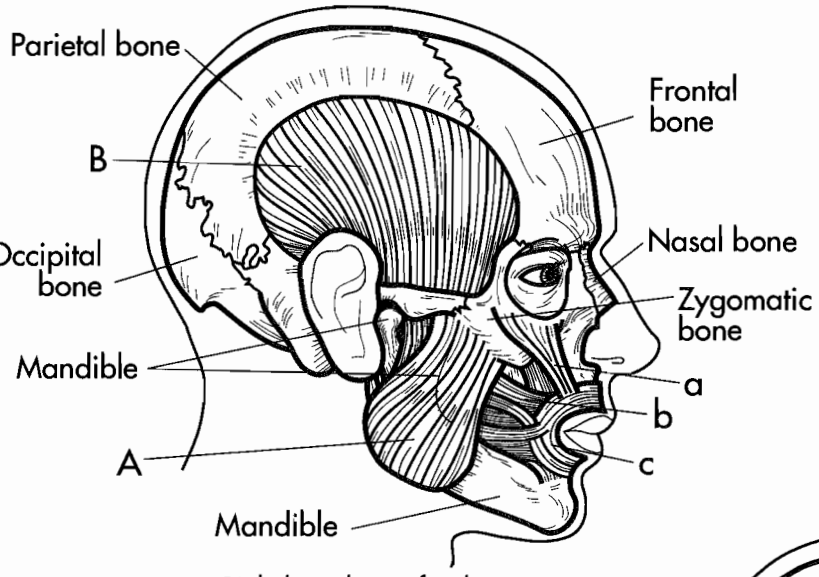
Frontalis	A	○
Occipitalis	B	○
Galea aponeurotica	B_1	○
Orbicularis oris	C	○
Zygomaticus	D	○
Levator labii superioris	E	○
Depressor labii inferioris	F	○
Buccinator	G	○
Mentalis	H	○
Platysma	I	○
Risorius	J	○
Obicularis oculi	K	○
Corrugator supercilii	L	○

Levator palpebrae superioris	M	○
Nasalis	a	○
Masseter	b	○
Sternocleidomastoid	c	○
Omohyoid	d	○
Sternohyoid	e	○
Temporalis	f	○
Posterior auricular	g	○
Splenius capitis	h	○
Trapezius	i	○
Levator scapulae	j	○
Middle scalene	k	○



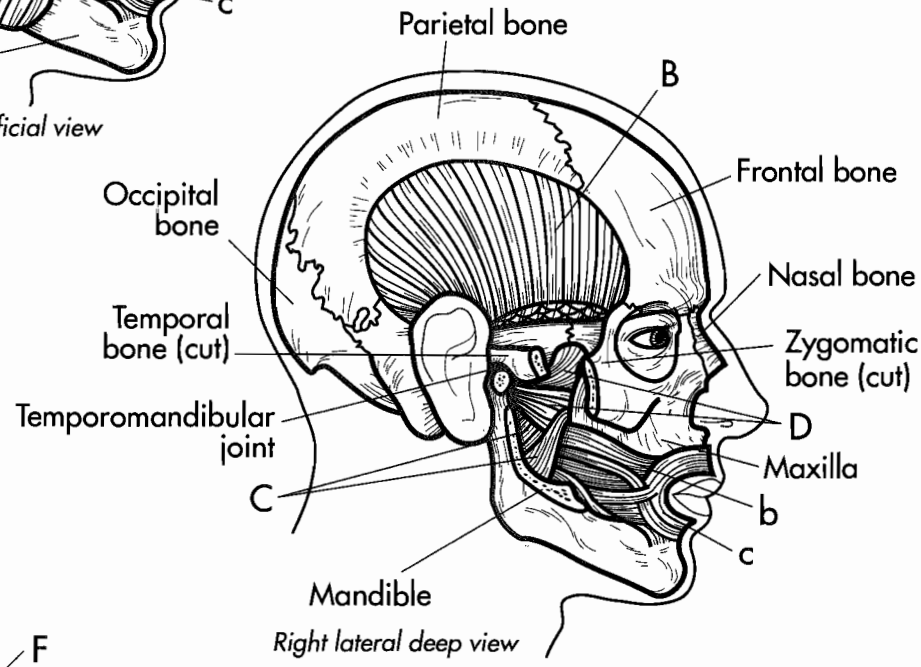
Right lateral superficial view

MUSCLES OF THE JAWS AND TONGUE

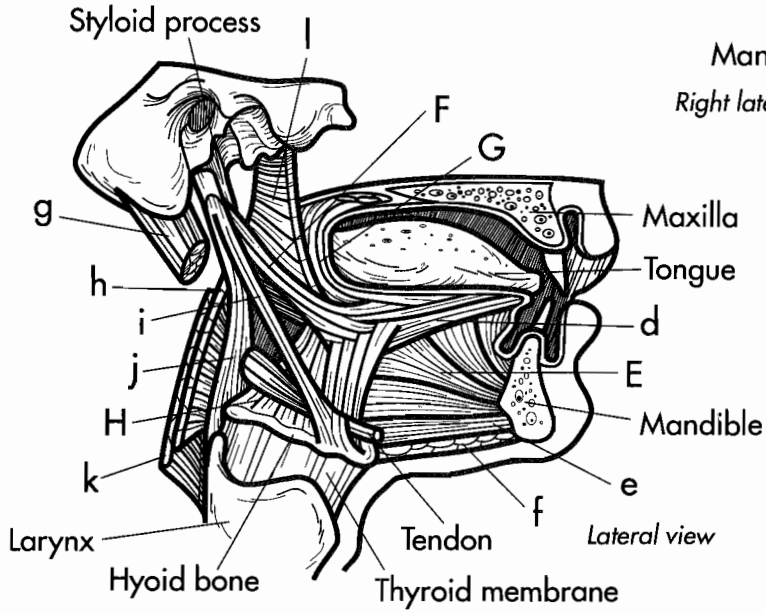


Right lateral superficial view

Masseter	A	○
Temporalis	B	○
Medial pterygoid	C	○
Lateral pterygoid	D	○
Genioglossus	E	○
Styloglossus	F	○
Palatoglossus	G	○
Hyoglossus	H	○
Levator labii superioris	a	○

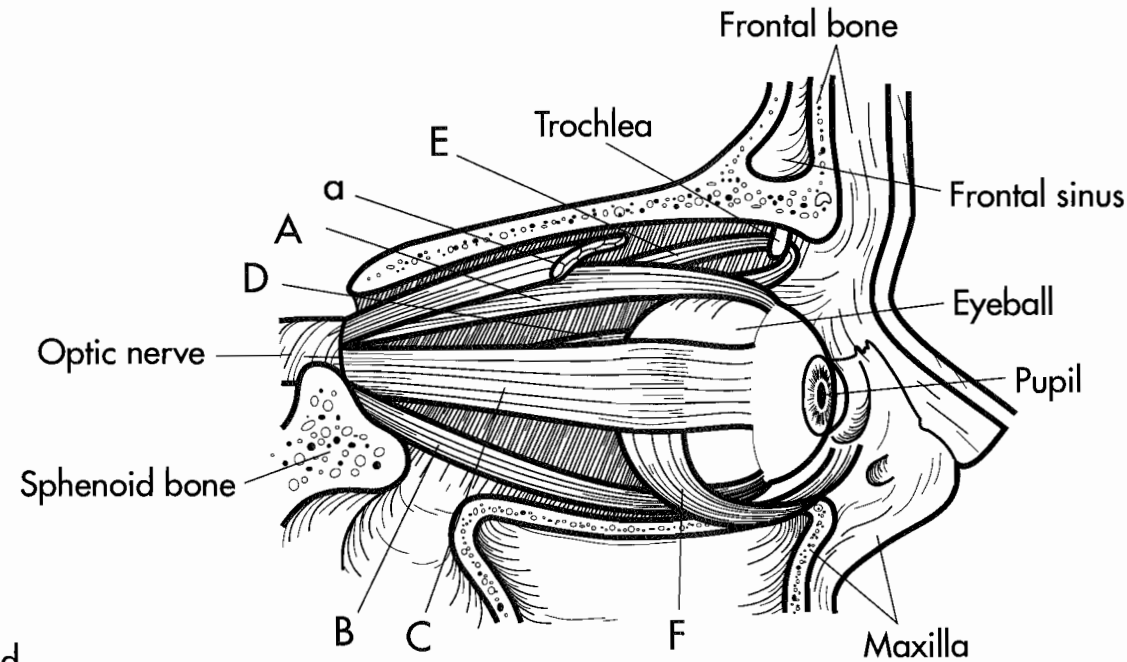


Right lateral deep view

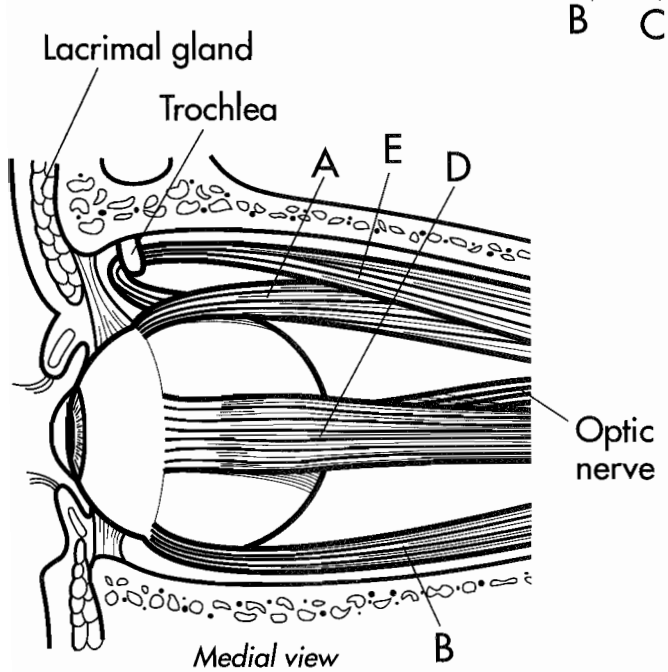


Lateral view

Buccinator	b	○
Orbicularis oris	c	○
Inferior longitudinal	d	○
Geniohyoid	e	○
Mylohyoid	f	○
Digastric	g	○
Middle constrictor	h	○
Stylohyoid	i	○
Stylopharyngeus	j	○
Inferior constrictor	k	○
Superior constrictor	l	○

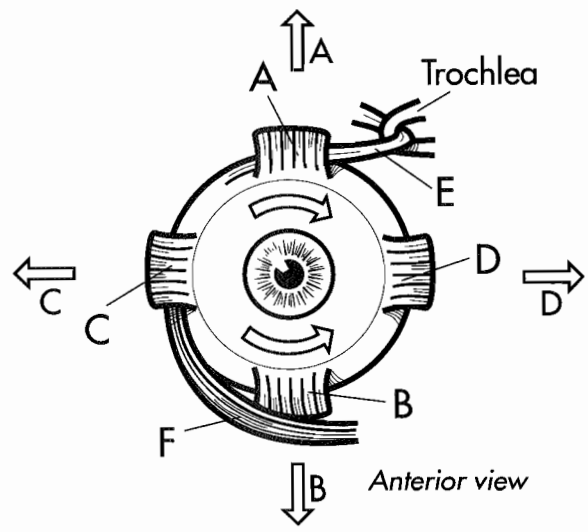


Lateral view of the right eye

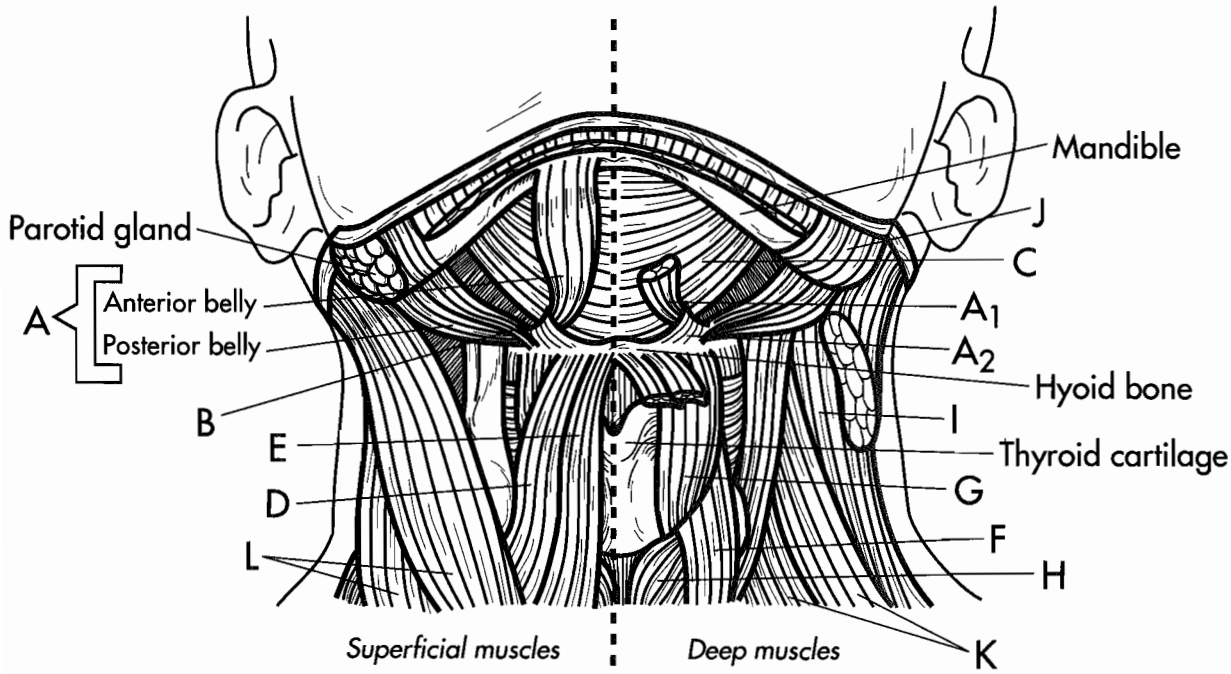


Medial view

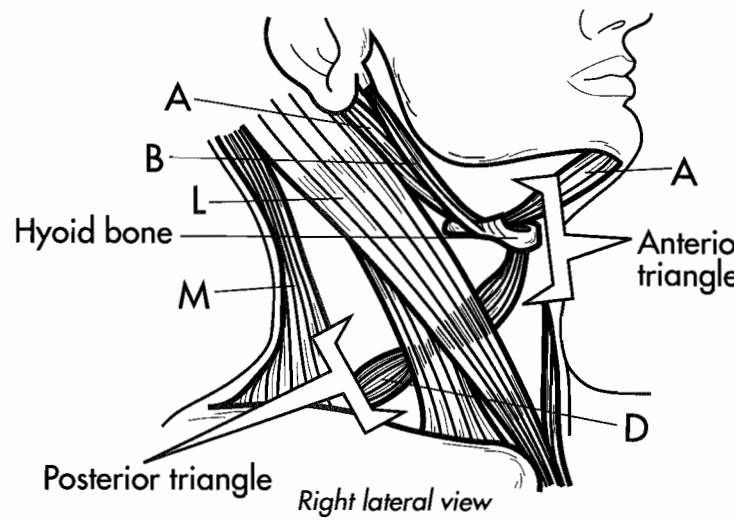
Superior rectus	A	○
Inferior rectus	B	○
Lateral rectus	C	○
Medial rectus	D	○
Superior oblique	E	○
Inferior oblique	F	○
Levator palpebrae superioris	a	○



Anterior view

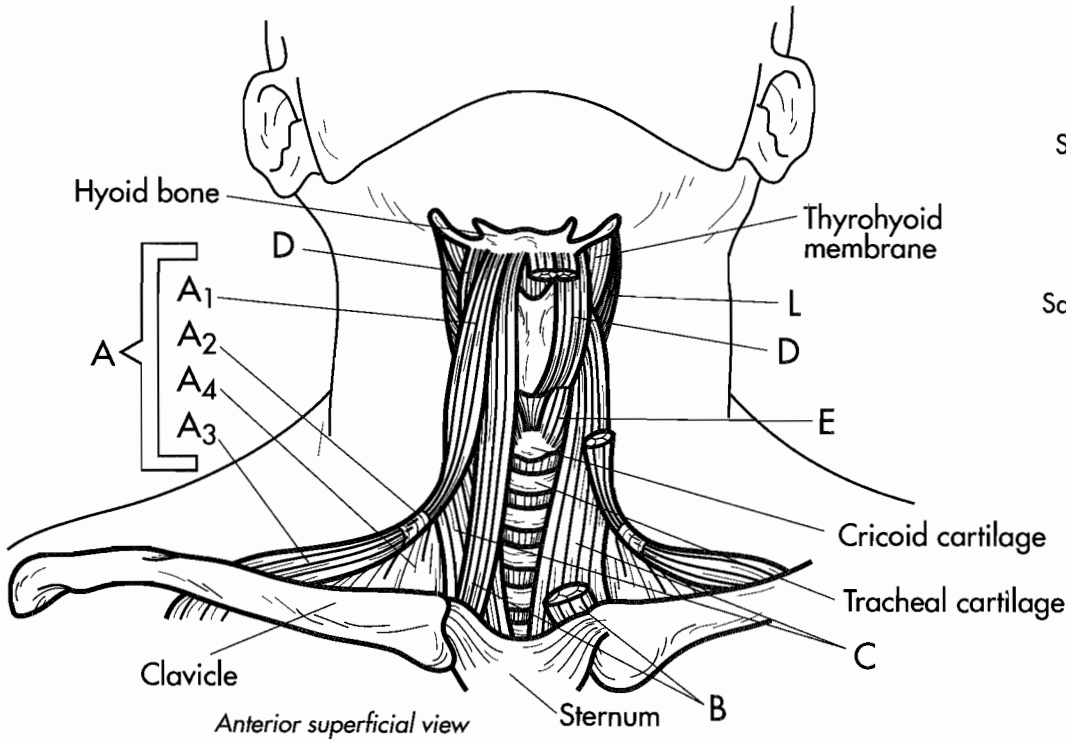


Digastric	A	○
Intermediate tendon	A_1	○
Fibrous tissue	A_2	○
Stylohyoid	B	○
Mylohyoid	C	○
Omohyoid	D	○
Sternohyoid	E	○
Sternothyroid	F	○
Thyrohyoid	G	○
Cricothyroid	H	○
Levator scapulae	I	○
Masseter	J	○
Scalene muscles	K	○
Sternocleidomastoid	L	○
Trapezius	M	○



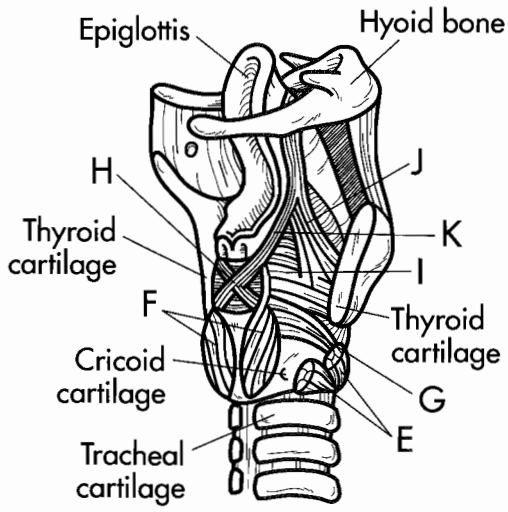
Omohyoid	A	○
Superior belly	A_1	○
Intermediate tendon	A_2	○
Inferior belly	A_3	○
Sheath of fascia	A_4	○

Sternohyoid	B	○
Sternothyroid	C	○
Thyrohyoid	D	○
Cricohyoid	E	○
Posterior cricoarytenoid	F	○
Lateral cricoarytenoid	G	○
Arytenoid	H	○
Thyroarytenoid	I	○
Thyroepiglottis	J	○
Aryepiglottis	K	○
Superior constrictor	L	○
Middle constrictor	M	○
Inferior constrictor	N	○
Palatopharyngeus	O	○
Salpingopharyngeus	P	○
Stylopharyngeus	Q	○

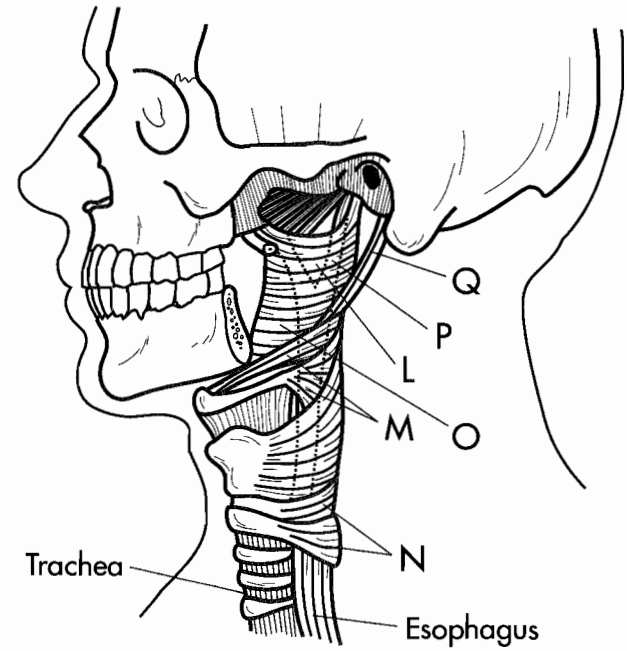


Anterior superficial view

Anterior deep view

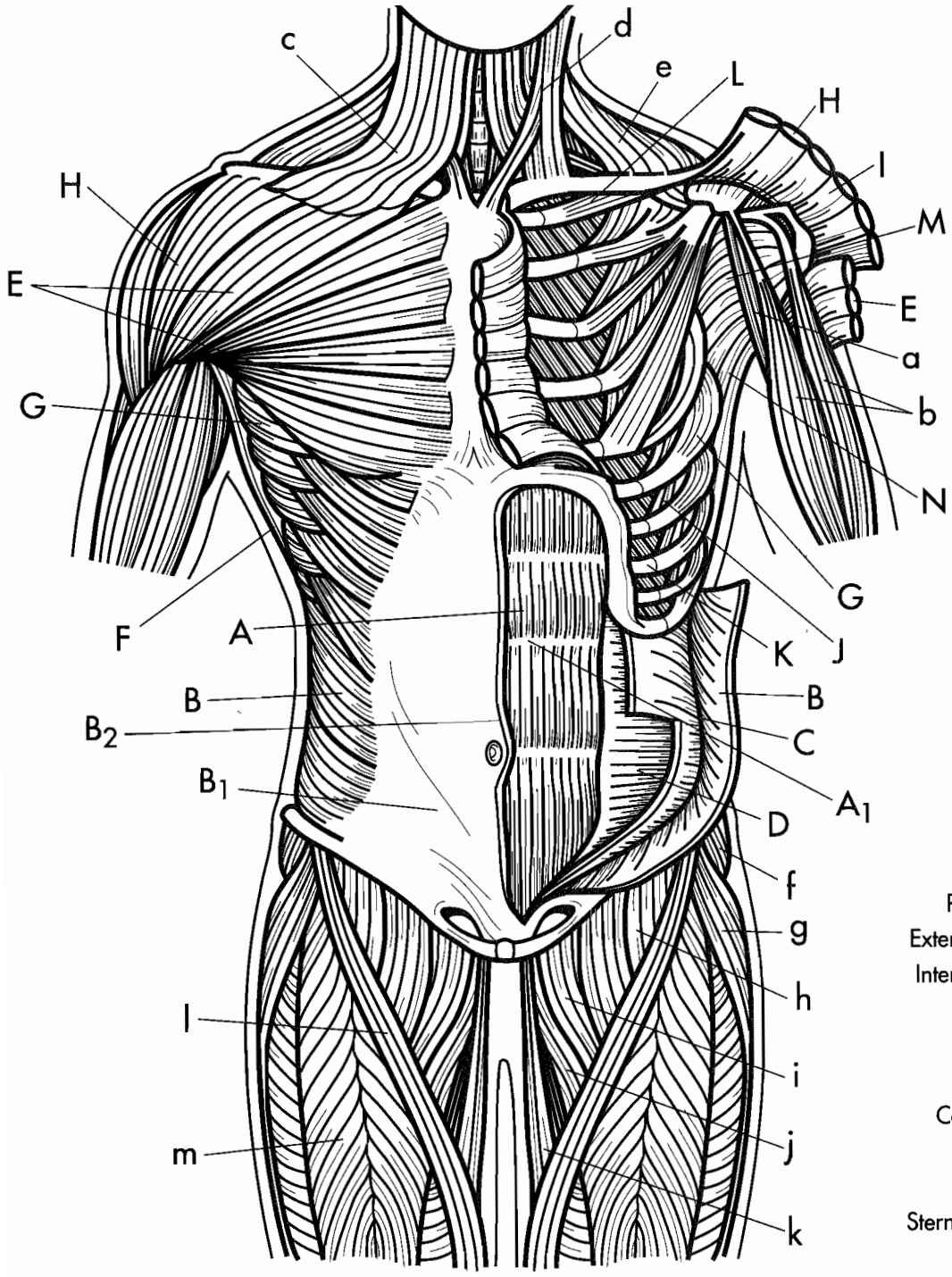


Right posterolateral view



Left lateral view

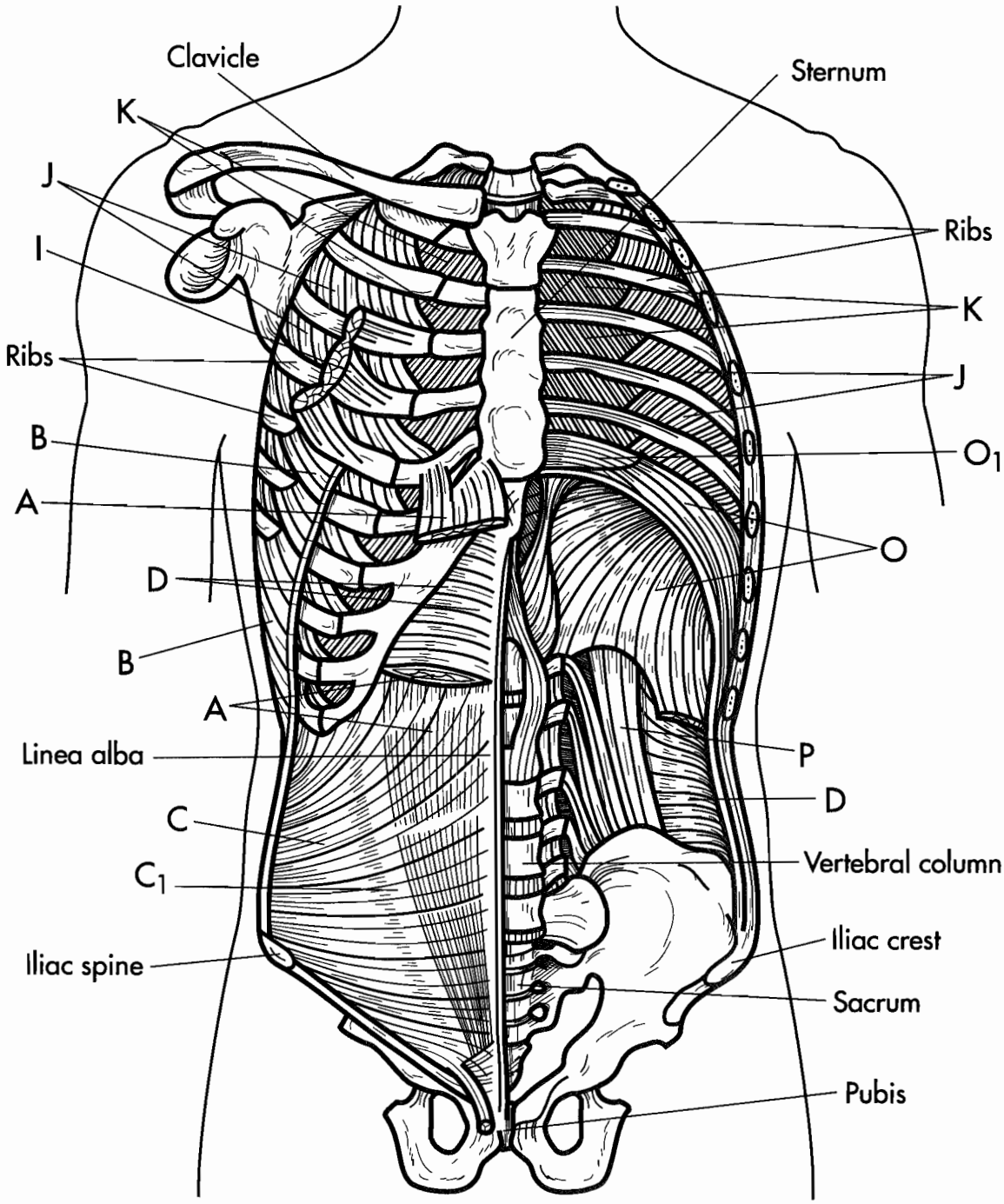
MUSCLES OF THE THORAX AND ABDOMEN (ANTERIOR)



Superficial view *Deep view*

Rectus abdominis	A	○
Intersections of tendon	A_1	○
External oblique	B	○
Aponeurosis	B_1	○
Linea alba	B_2	○
Internal oblique	C	○
Transversus abdominis	D	○
Pectoralis major	E	○
Latissimus dorsi	F	○
Serratus anterior	G	○

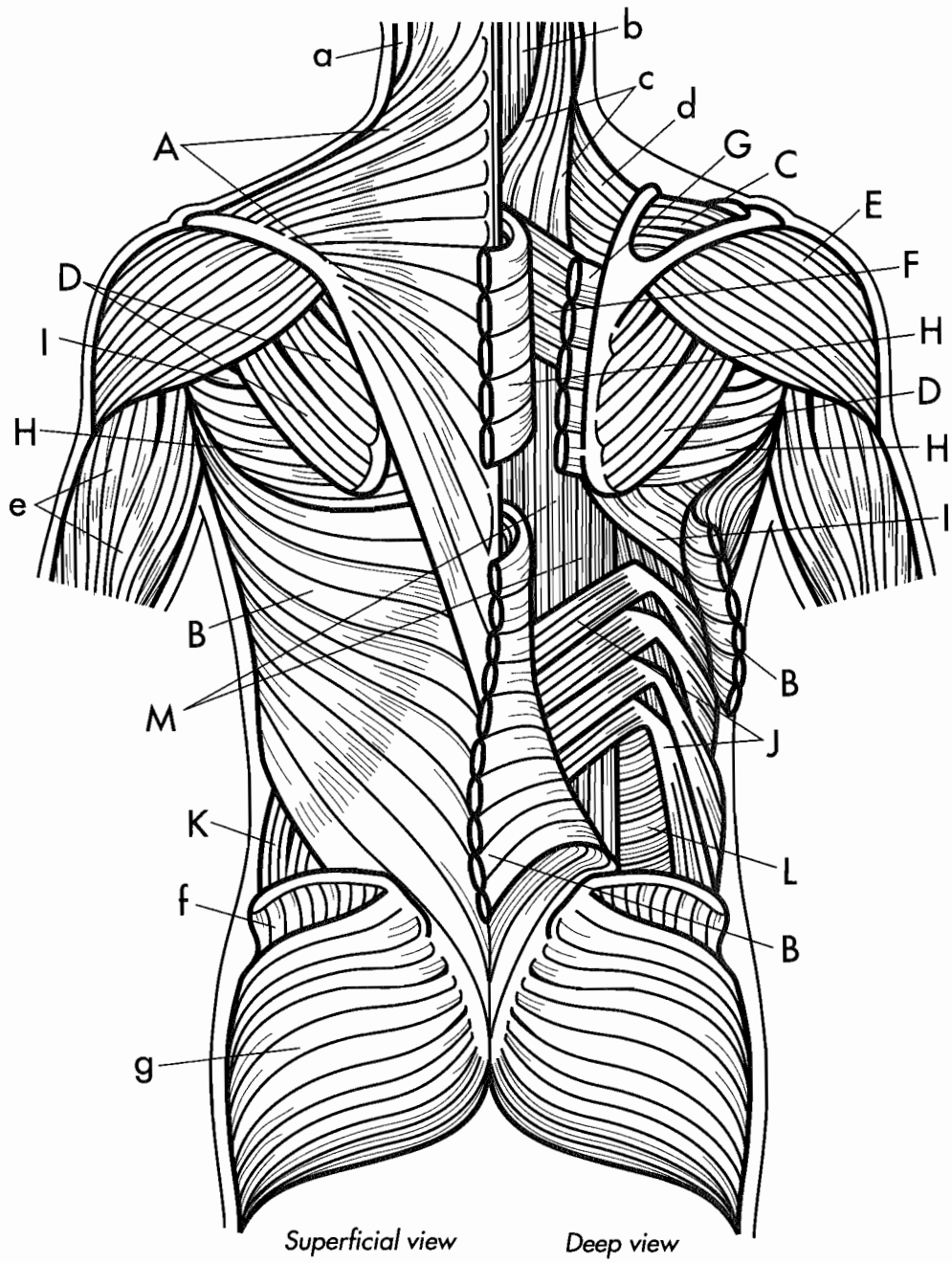
Deltoid	H	○
Pectoralis minor	I	○
External intercostals	J	○
Internal intercostals	K	○
Subclavius	L	○
Subscapularis	M	○
Teres major	N	○
Coracobrachialis	a	○
Biceps brachii	b	○
Platysma	c	○
Sternocleidomastoid	d	○
Trapezius	e	○
Gluteus medius	f	○
Tensor fascia latae	g	○
Iliopsoas	h	○
Pectineus	i	○
Adductor longus	j	○
Gracilis	k	○
Sartorius	l	○
Rectus femoris	m	○



Superficial view *Deep view*

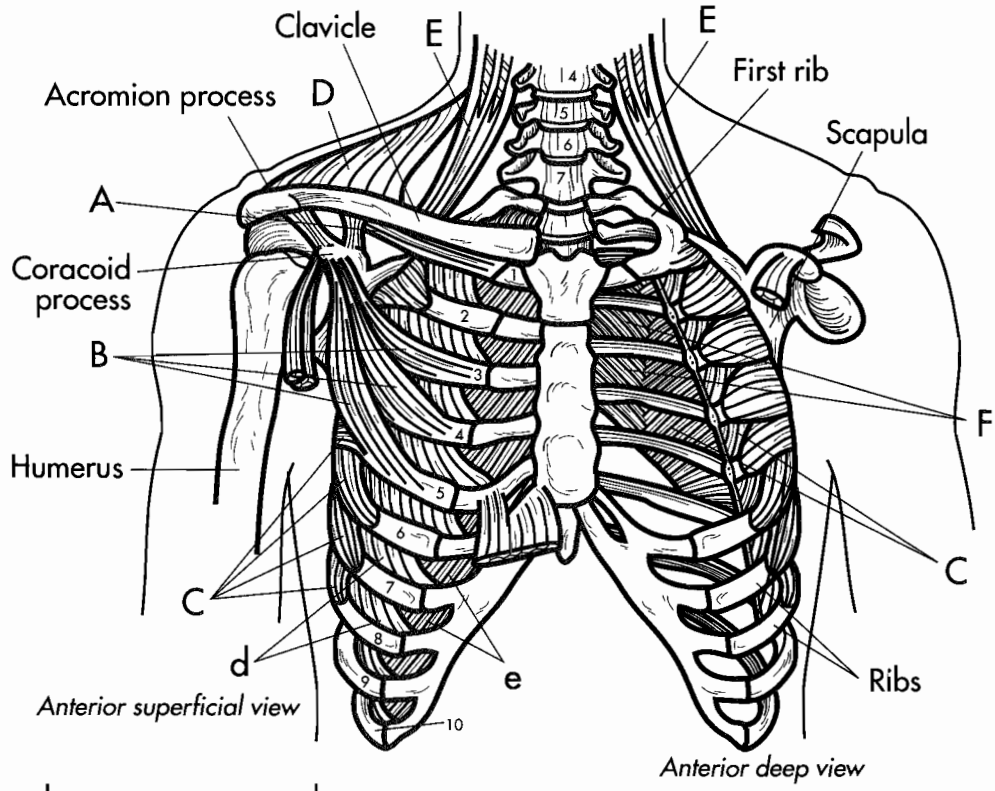
Rectus abdominis	A	○	Transversus abdominis	D	○	Diaphragm	O	○
External oblique	B	○	Pectoralis minor	I	○	Central tendon	O_1	○
Internal oblique	C	○	External intercostals	J	○	Quadratus lumborum	P	○
Aponeurosis	C_1	○	Internal intercostals	K	○			

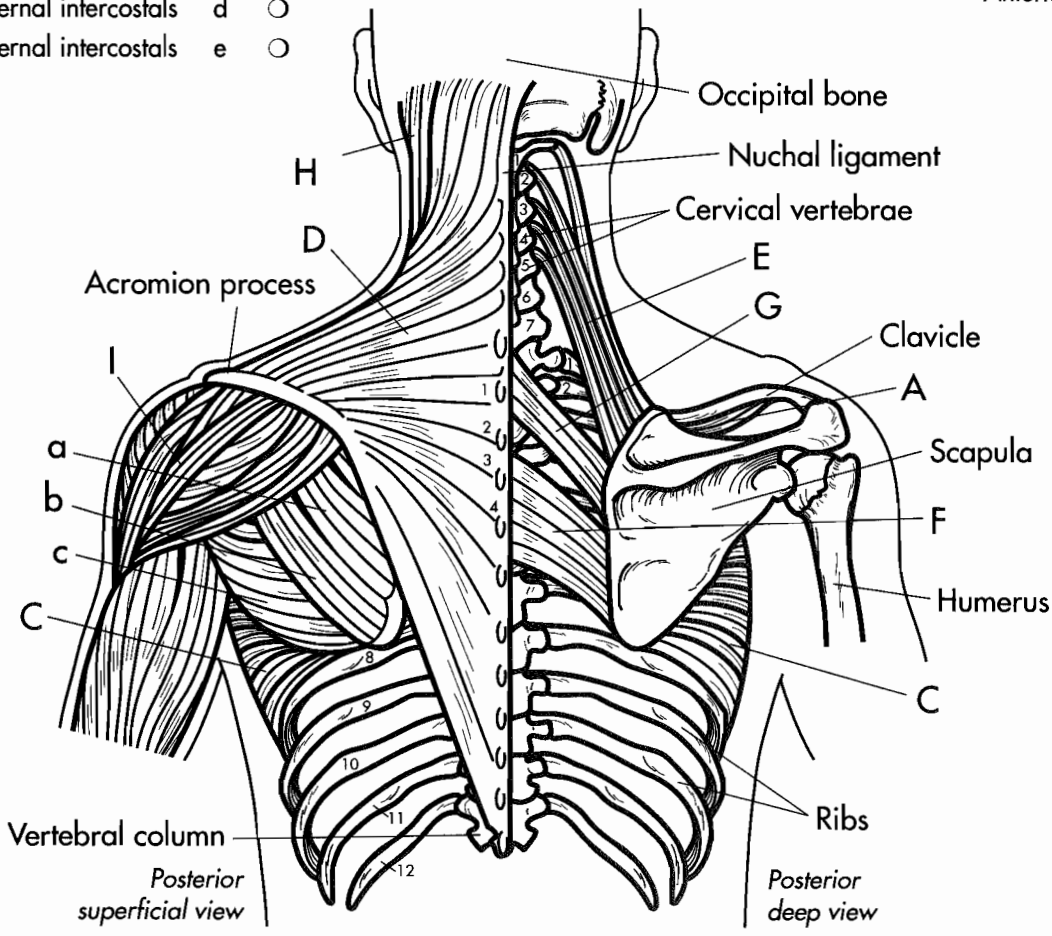
MUSCLES OF THE THORAX AND ABDOMEN (POSTERIOR)

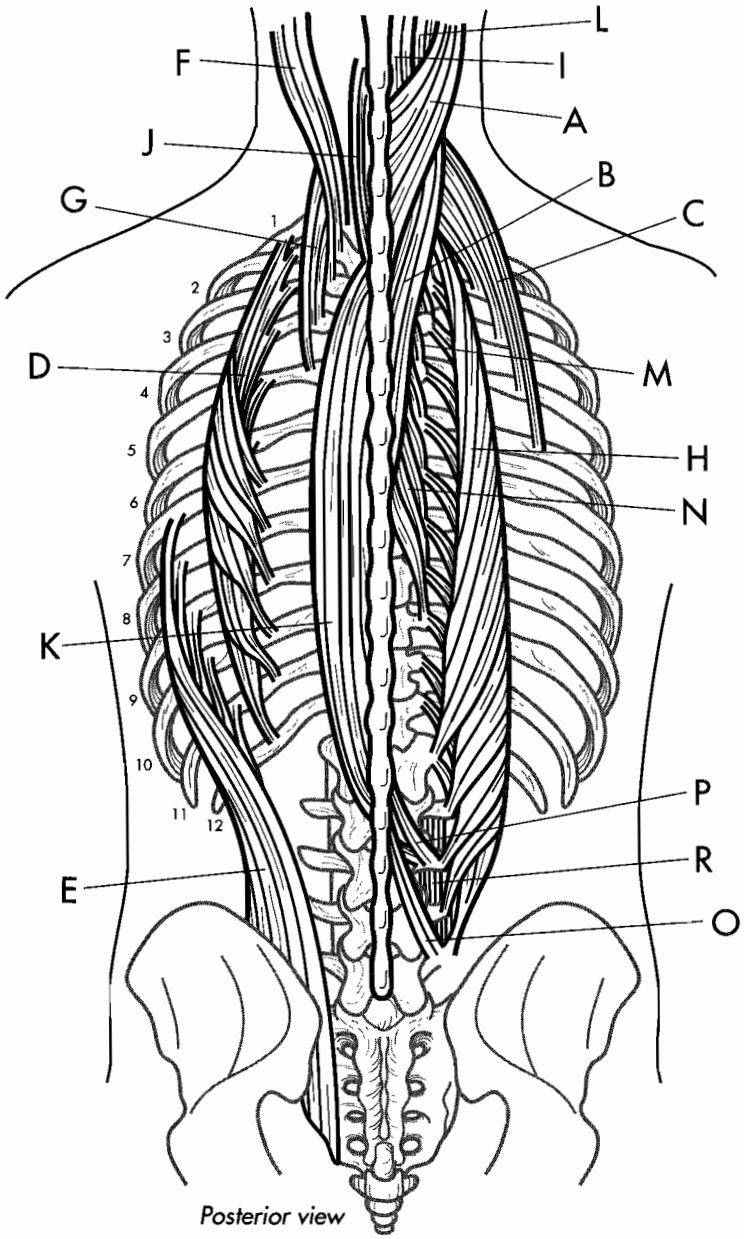


Trapezius	A	○	Serratus posterior superior	H	○	Semispinalis capitis	b	○
Latissimus dorsi	B	○	Serratus anterior	I	○	Splenius capitis	c	○
Supraspinatus	C	○	Serratus posterior inferior	J	○	Levator scapulae	d	○
Infraspinatus	D	○	External oblique	K	○	Triceps brachii	e	○
Deltoid	E	○	Internal oblique	L	○	Gluteus medius	f	○
Rhomboideus major	F	○	Erector spinous	M	○	Gluteus maximus	g	○
Rhomboideus minor	G	○	Sternocleidomastoid	a	○			

Subclavius	A	○
Pectoralis minor	B	○
Serratus anterior	C	○
Trapezius	D	○
Levator scapulae	E	○
Rhomboideus major	F	○
Rhomboideus minor	G	○
Sternocleidomastoid	H	○
Deltoid	I	○
Infraspinatus muscle	a	○
Teres minor	b	○
Teres major	c	○
External intercostals	d	○
Internal intercostals	e	○

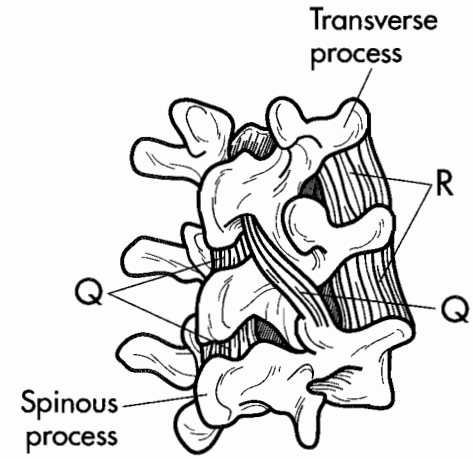




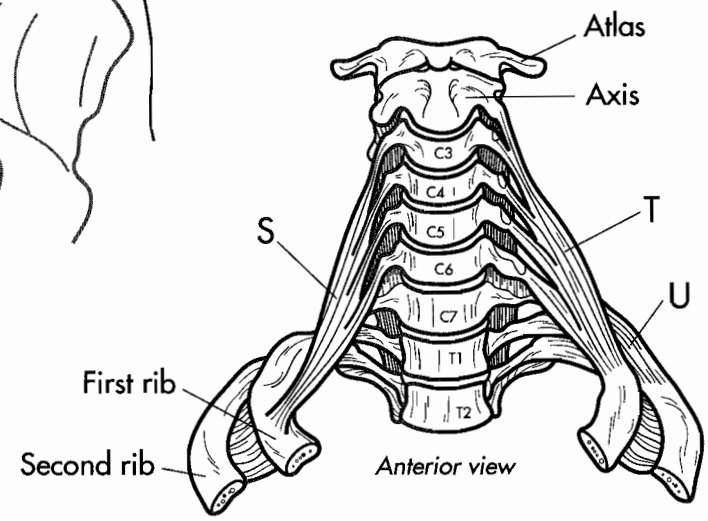


Posterior view

Splenius capitis	A	○
Splenius cervicis	B	○
Iliocostalis cervicis	C	○
Iliocostalis thoracis	D	○
Iliocostalis lumborum	E	○
Longissimus capitis	F	○



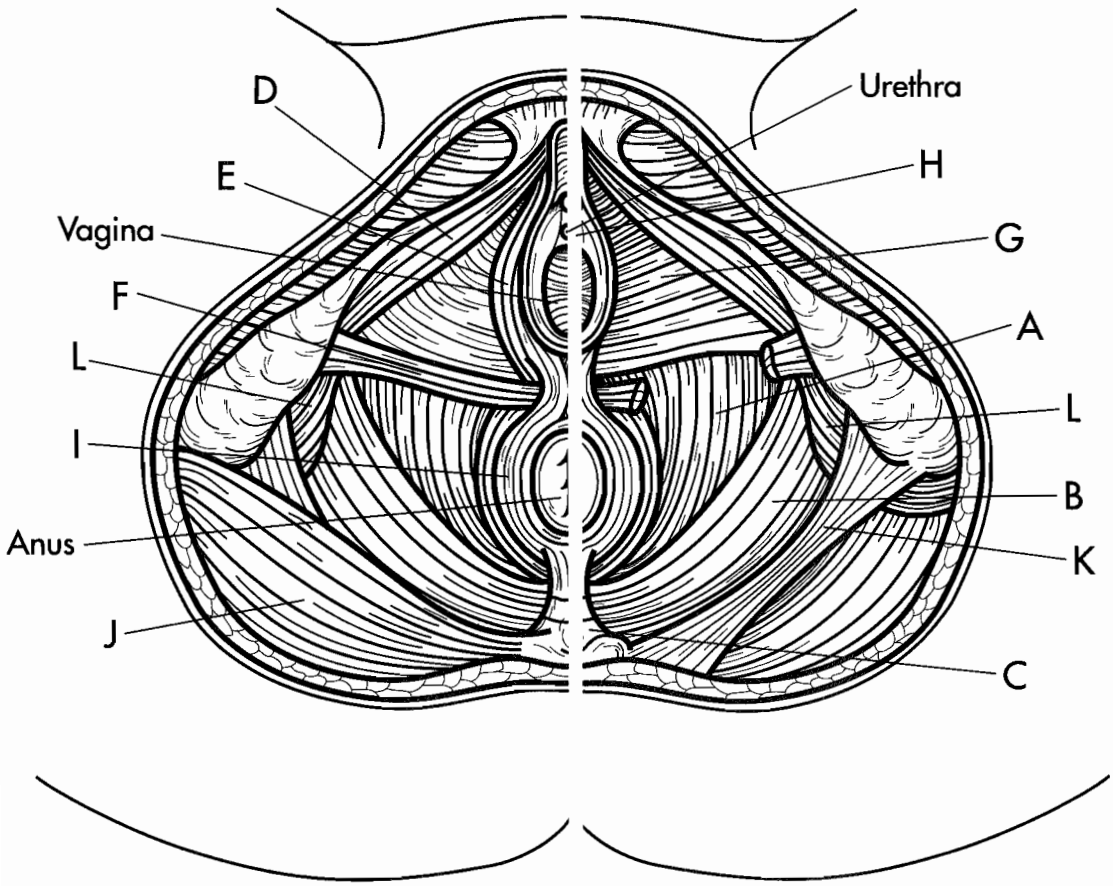
Posterolateral view



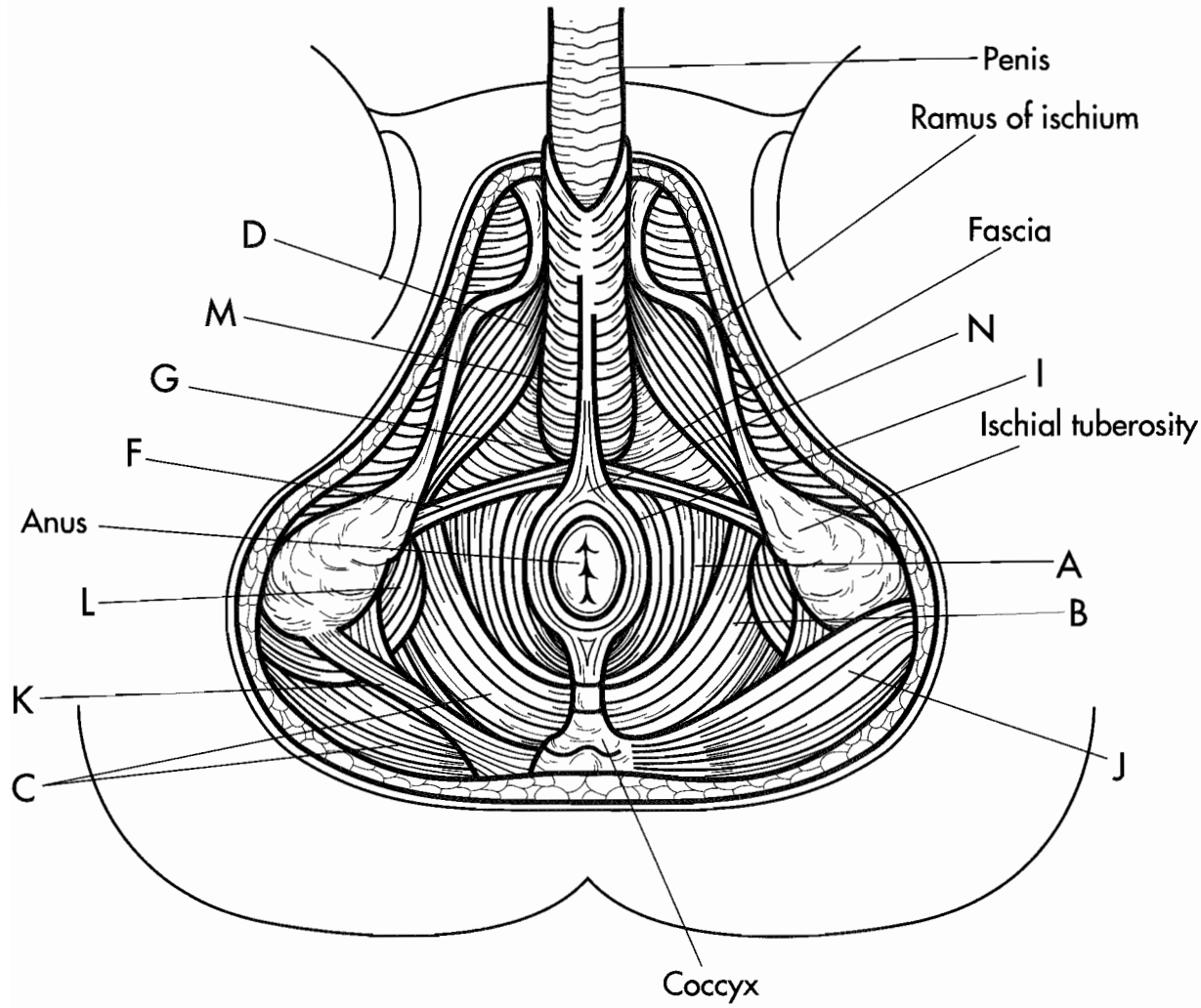
Anterior view

Longissimus cervicis	G	○
Logissimus thoracis	H	○
Spinalis capitis	I	○
Spinalis cervicis	J	○
Spinalis thoracis	K	○
Semispinalis capitis	L	○
Semispinalis cervicis	M	○
Semispinalis thoracis	N	○
Multifidus group	O	○
Rotators	P	○

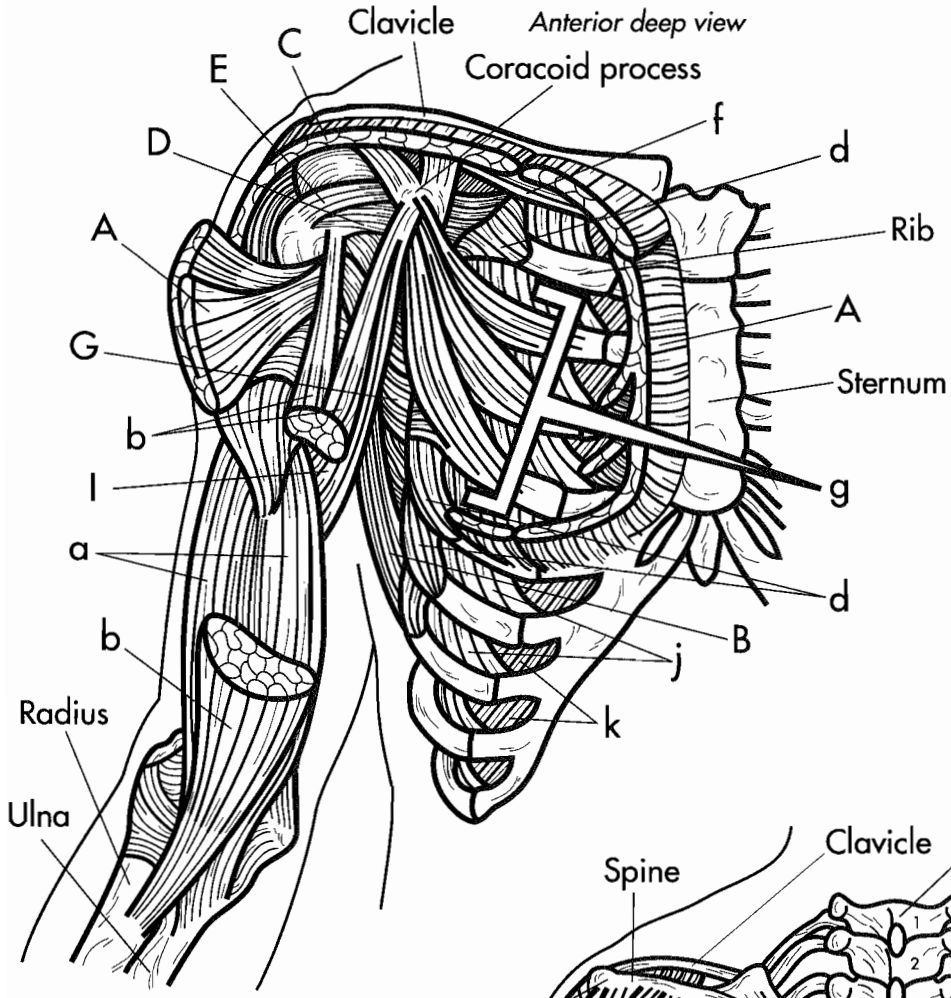
Interspinales	Q	○
Intertransversarii	R	○
Interior scalene	S	○
Middle scalene	T	○
Posterior scalene	U	○



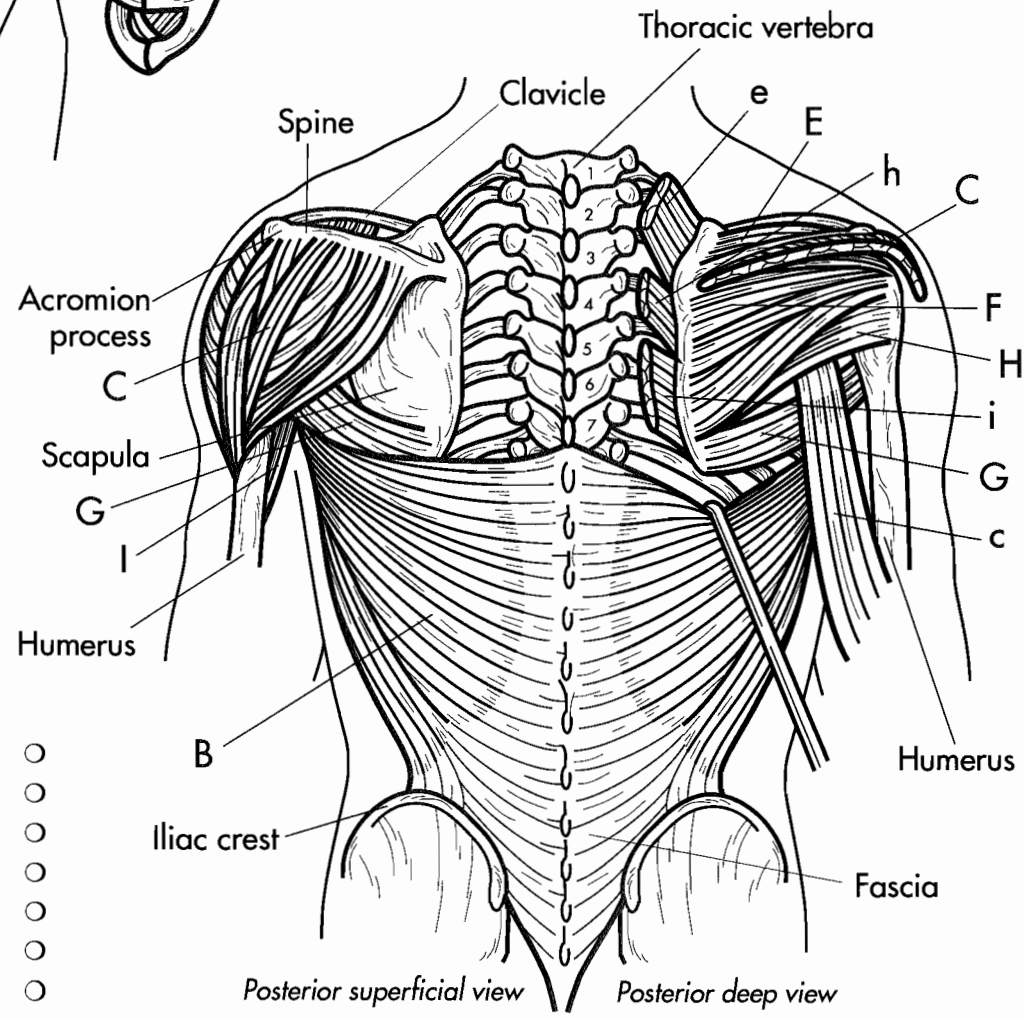
Pubococcygeus	A	○
Iliococcygeus	B	○
Coccygeus	C	○
Ischiocavernosus	D	○
Bulbocavernosus	E	○
Superficial transverse perineus	F	○
Deep transverse perineus	G	○
Urethral sphincter	H	○
External anal sphincter	I	○
Gluteus maximus	J	○
Sacrotuberous ligament	K	○
Obturator internus	L	○



Pubococcygeus	A	❍
Iliococcygeus	B	❍
Coccygeus	C	❍
Ischiocavernosus	D	❍
Superficial transverse perineus	F	❍
Deep transverse perineus	G	❍
External anal sphincter	I	❍
Gluteus maximus	J	❍
Sacrotuberous ligament	K	❍
Obturator internus	L	❍
Bulbospongiosus	M	❍
Central tendon	N	❍

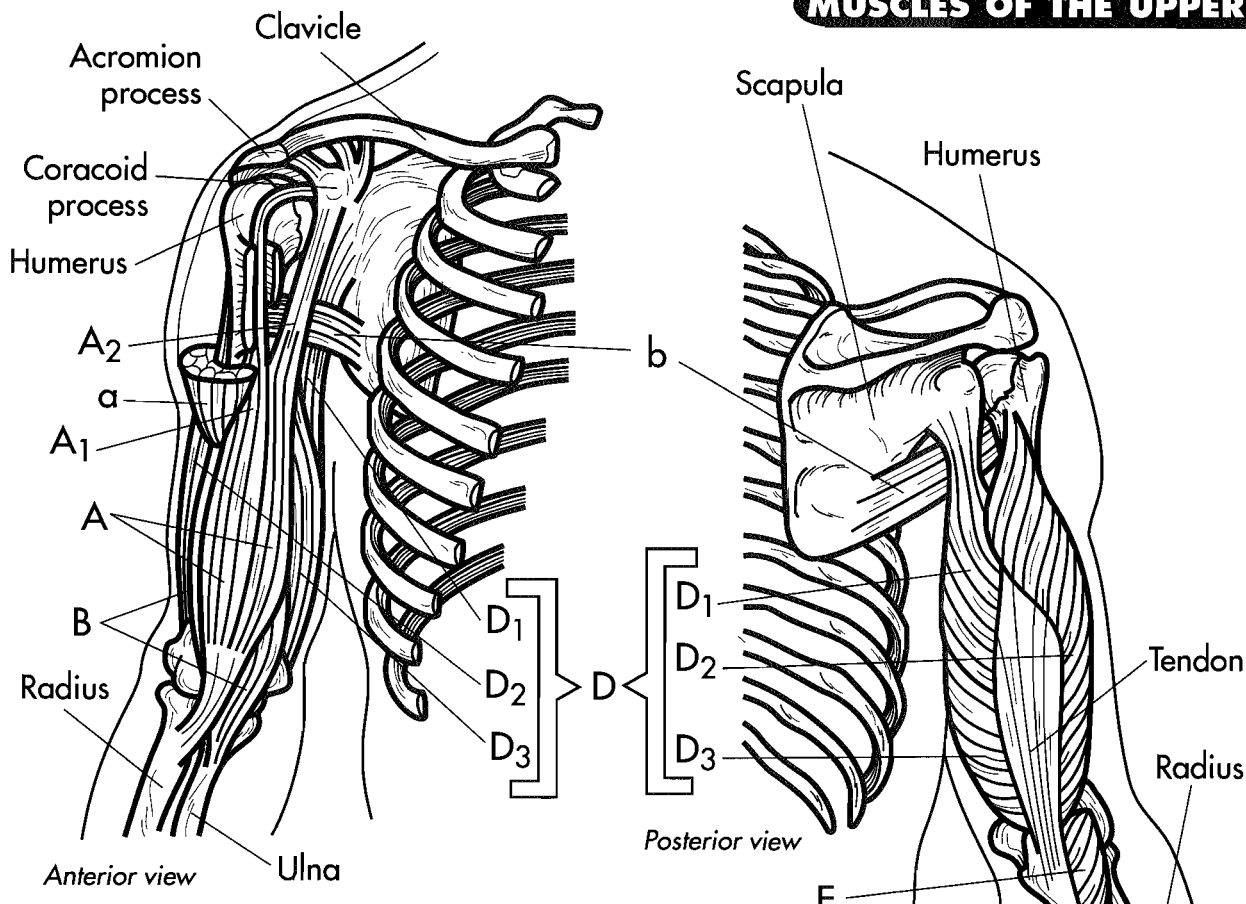


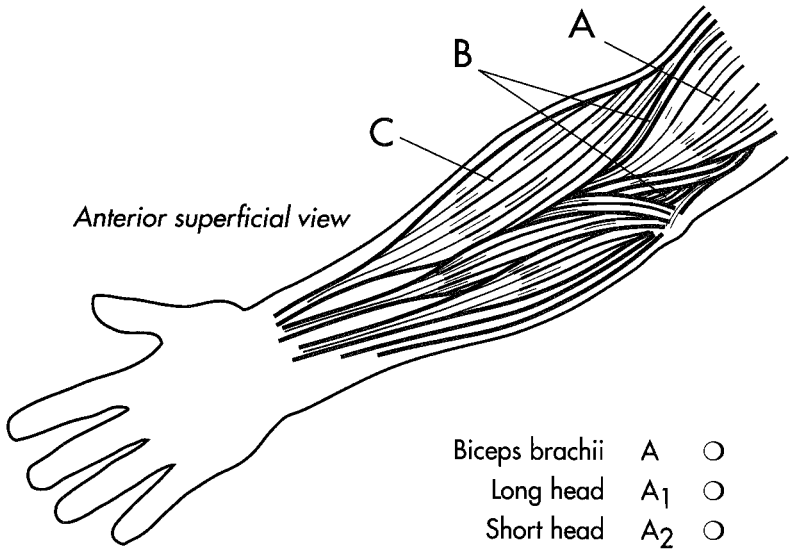
Pectoralis major	A	○
Latissimus dorsi	B	○
Deltoid	C	○
Subscapularis	D	○
Supraspinatus	E	○
Infraspinatus	F	○
Teres major	G	○
Teres minor	H	○
Coracobrachialis	I	○
Brachialis	a	○
Biceps brachii	b	○
Triceps brachii	c	○
Serratus anterior	d	○

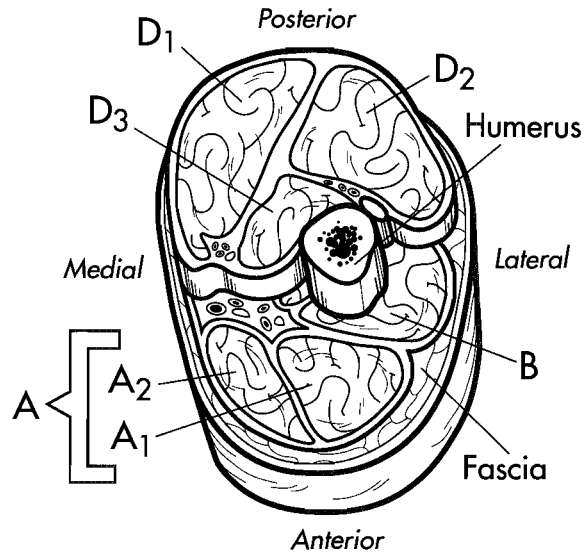


Levator scapula	e	○
Subclavius	f	○
Pectoralis minor	g	○
Rhomboideus minor	h	○
Rhomboideus major	i	○
External intercostals	j	○
Internal intercostals	k	○

MUSCLES OF THE UPPER ARM

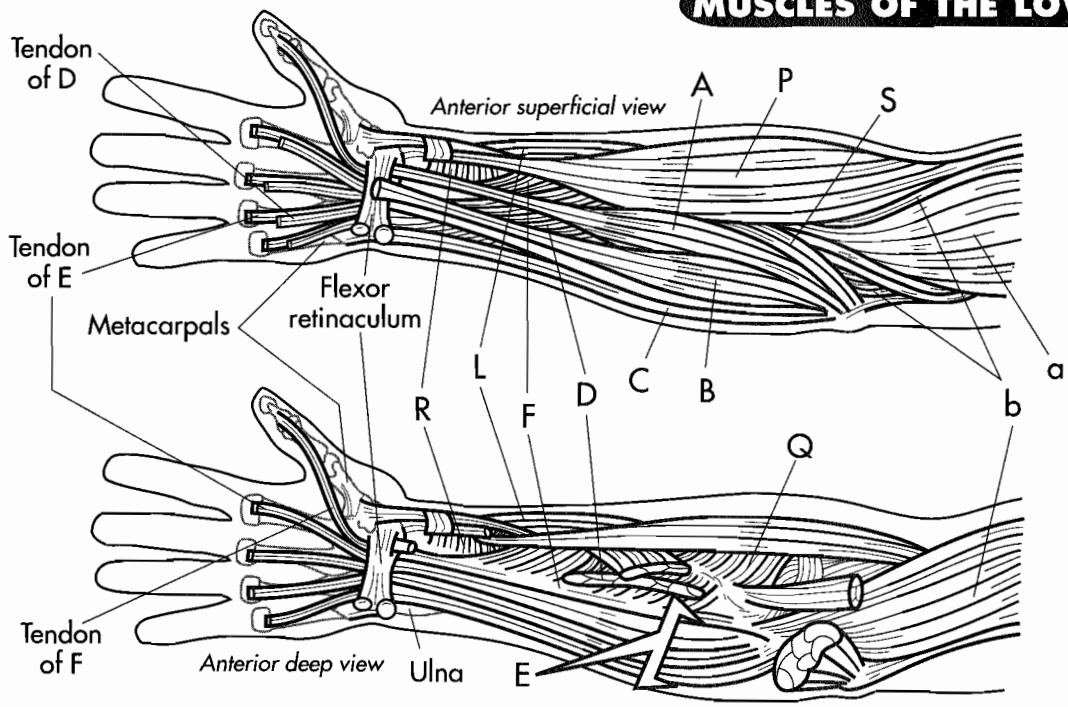


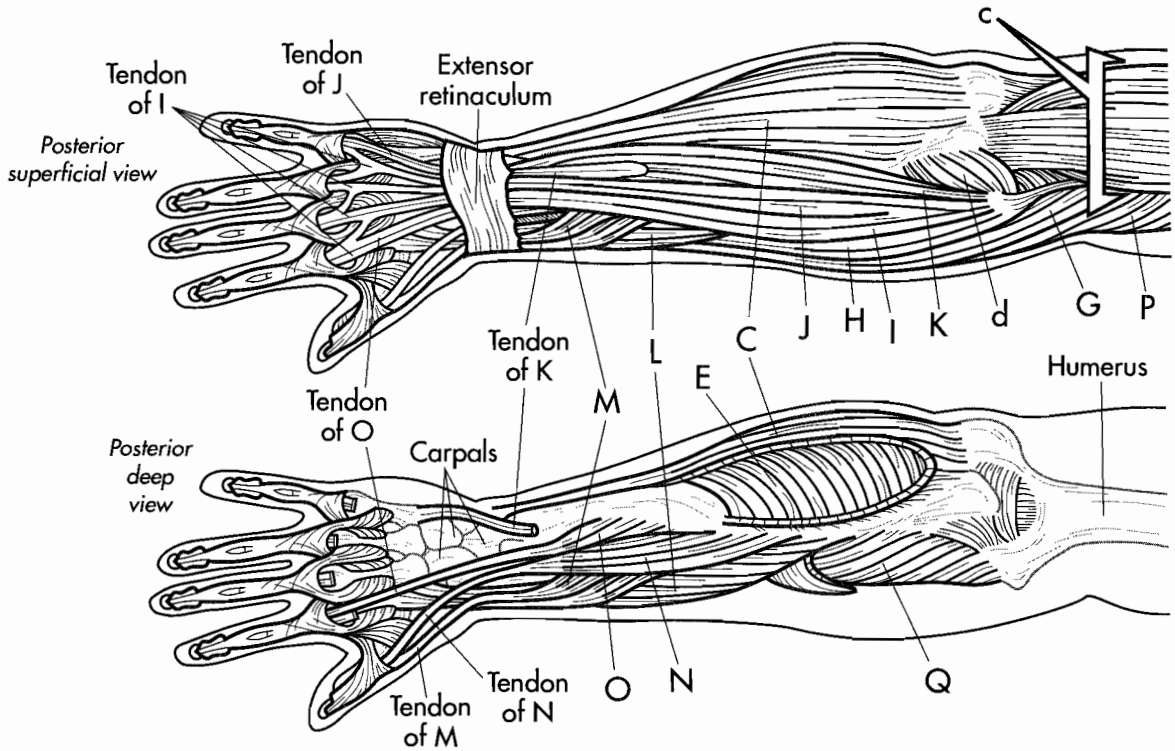




Biceps brachii	A	○
Long head	A_1	○
Short head	A_2	○
Brachialis	B	○
Brachioradialis	C	○
Triceps brachii	D	○
Long head	D_1	○
Lateral head	D_2	○
Medial head	D_3	○
Anconeus	E	○
Deltoid	a	○
Teres major	b	○

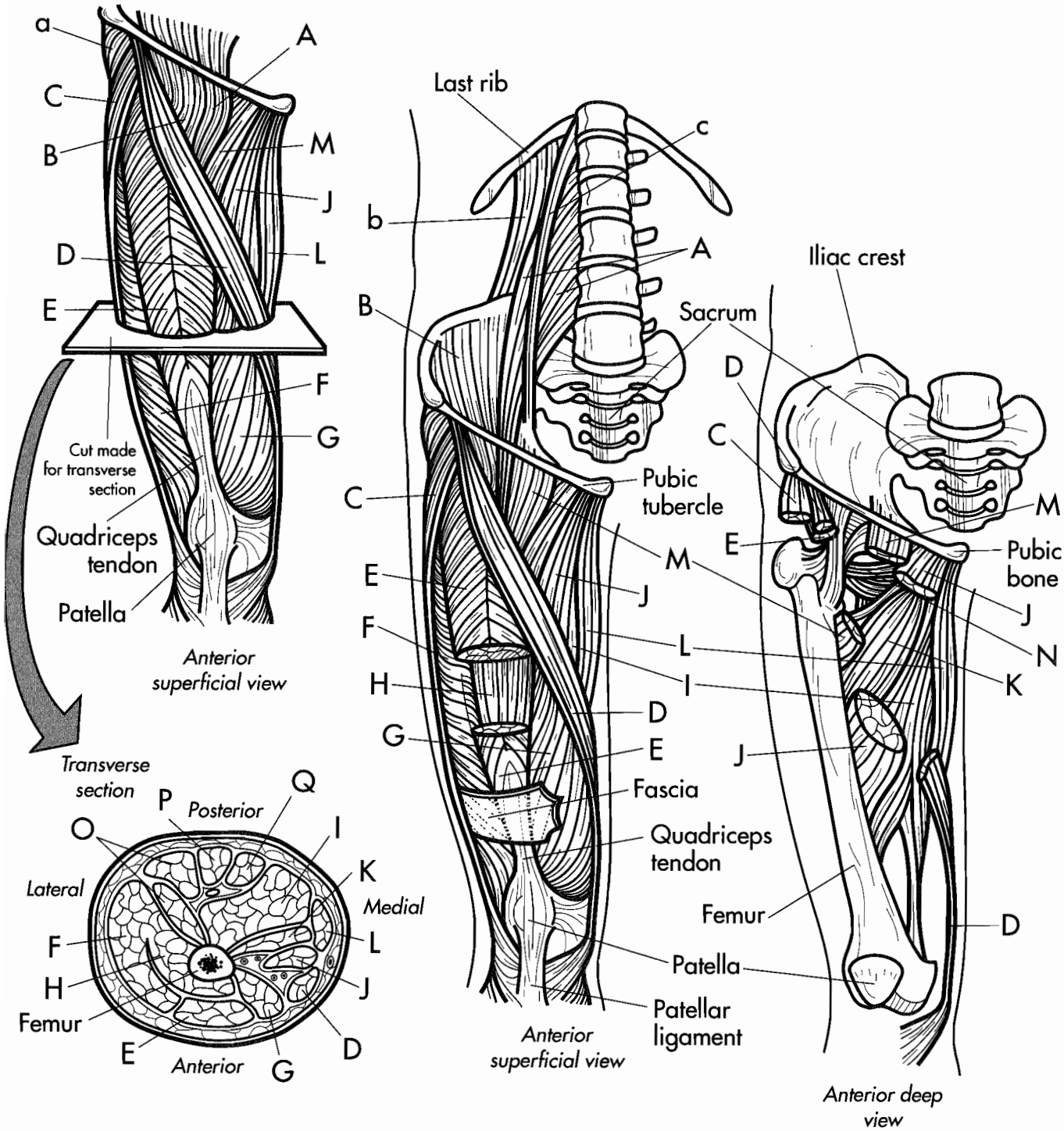
MUSCLES OF THE LOWER ARM



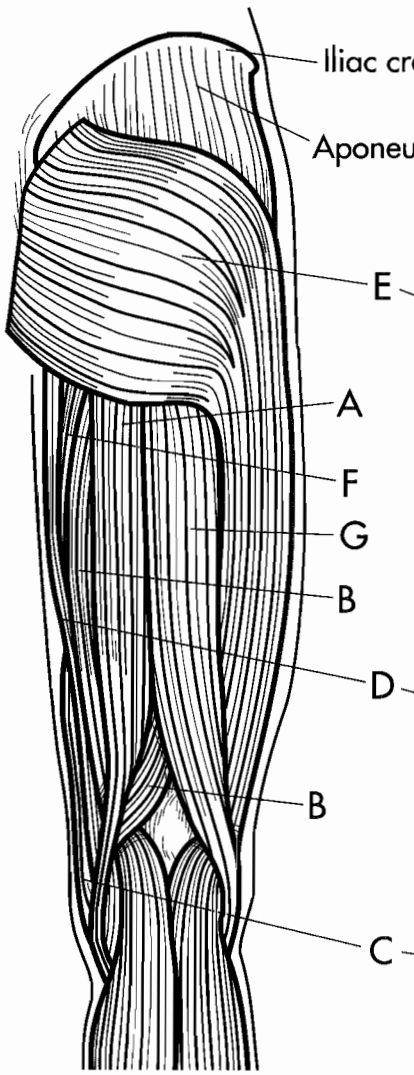


Flexor carpi radialis	A ○	Extensor digitorum	I ○	Supinator	Q ○
Palmaris longis	B ○	Extensor digiti minimi	J ○	Pronator quadratus	R ○
Flexor carpi ulnaris	C ○	Extensor carpi ulnaris	K ○	Pronator teres	S ○
Flexor digitorum superficialis	D ○	Abductor pollicis longus	L ○	Biceps brachii	a ○
Flexor digitorum profundus	E ○	Extensor pollicis brevis	M ○	Brachialis	b ○
Flexor pollicis longus	F ○	Extensor pollicis longus	N ○	Triceps brachii	c ○
Extensor carpi radialis longus	G ○	Extensor indicis	O ○	Anconeus	d ○
Extensor carpi radialis brevis	H ○	Brachioradialis	P ○		

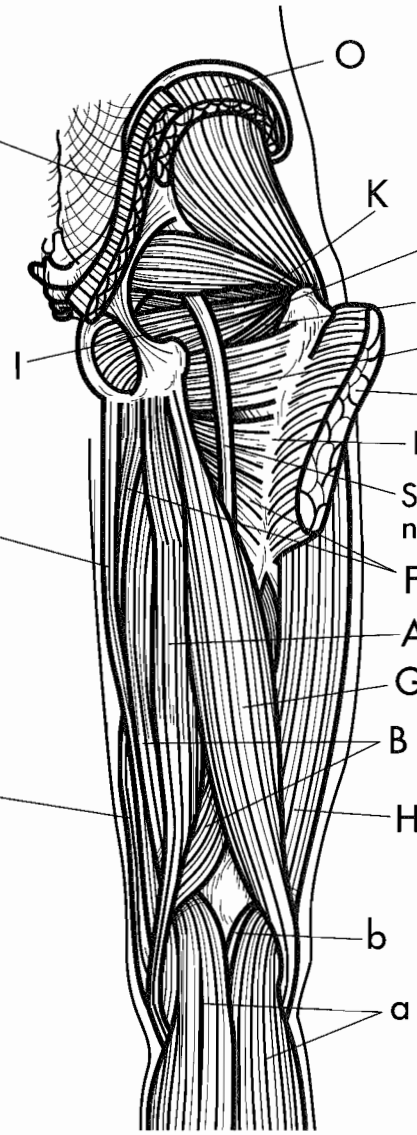
MUSCLES OF THE THIGH (ANTERIOR)



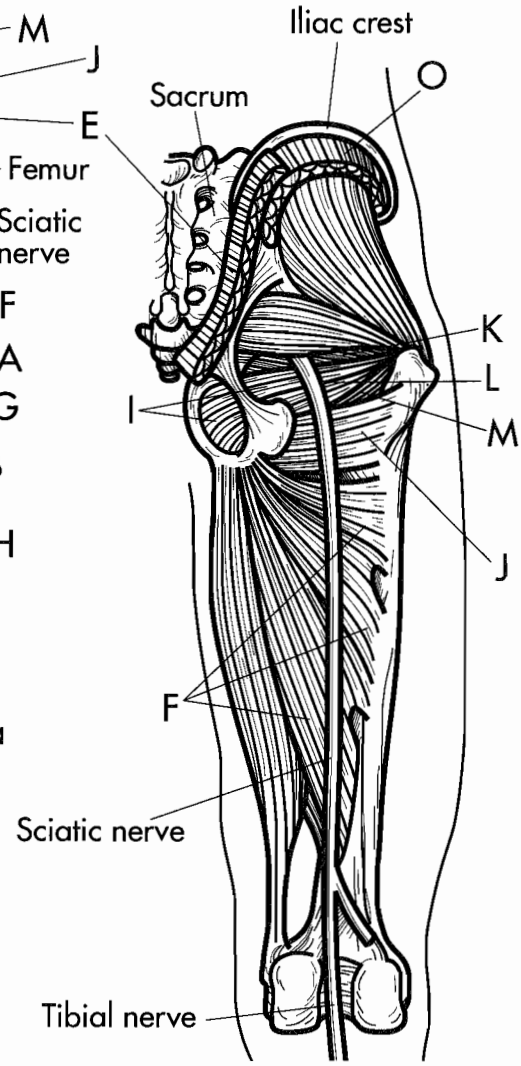
Psoas major	A	○	Vastus intermedius	H	○	Biceps femoris	O	○
Iliacus	B	○	Adductor magnus	I	○	Semitendinosus	P	○
Tensor fasciae latae	C	○	Adductor longus	J	○	Semimembranosus	Q	○
Sartorius	D	○	Adductor brevis	K	○	Gluteus medius	a	○
Rectus femoris	E	○	Gracilis	L	○	Quadratus lumborum	b	○
Vastus lateralis	F	○	Pectineus	M	○	Psoas minor	c	○
Vastus medialis	G	○	Obturator externus	N	○			



Posterior superficial view



Posterior superficial view

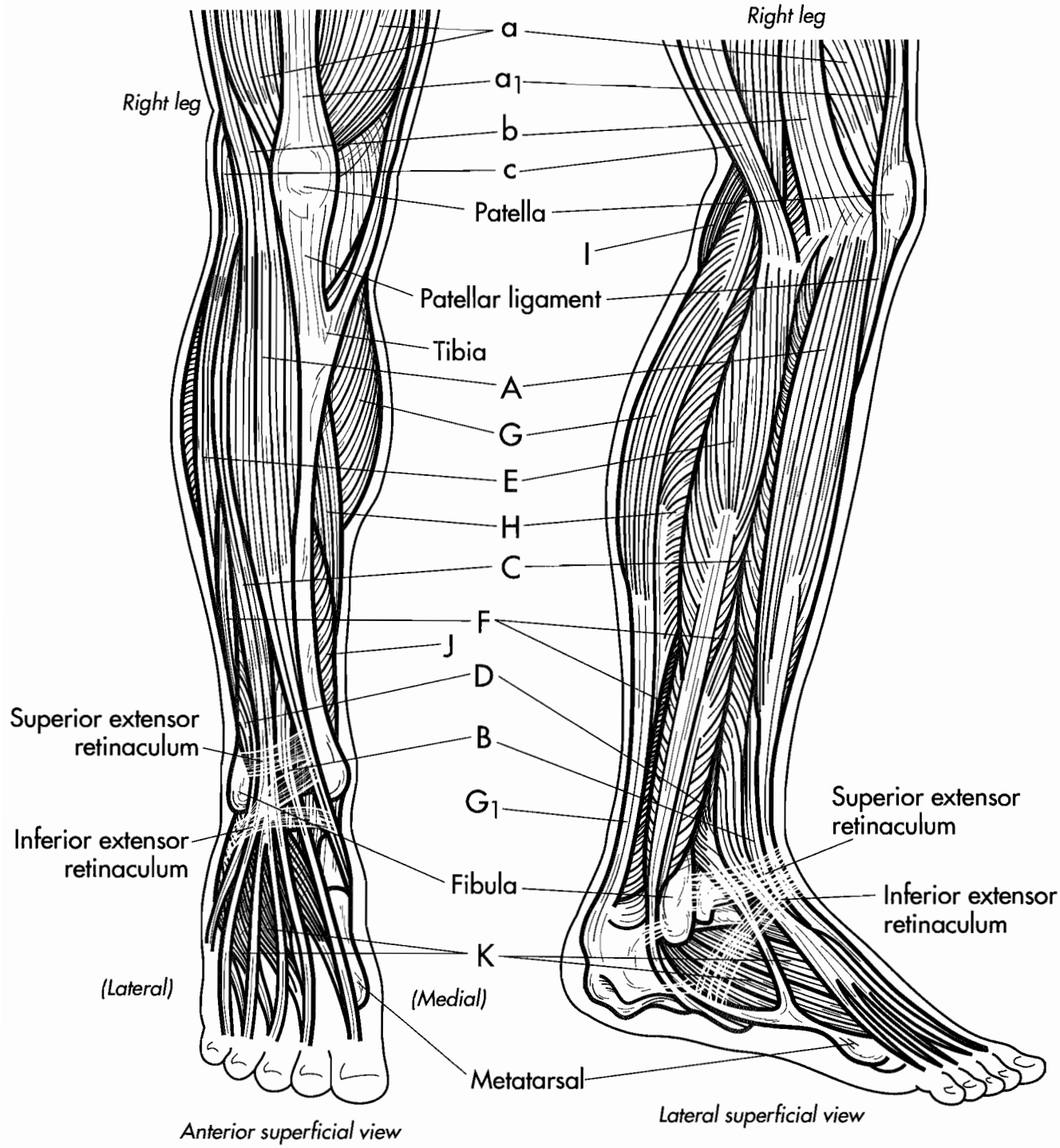


Posterior deep view

Semitendinosus	A	❍
Semimembranosus	B	❍
Sartorius	C	❍
Gracilis	D	❍
Gluteus maximus	E	❍
Adductor magnus	F	❍
Biceps femoris	G	❍
Vastus lateralis	H	❍
Obturator internus	I	❍
Quadratus femoris	J	❍
Superior gemellus	K	❍

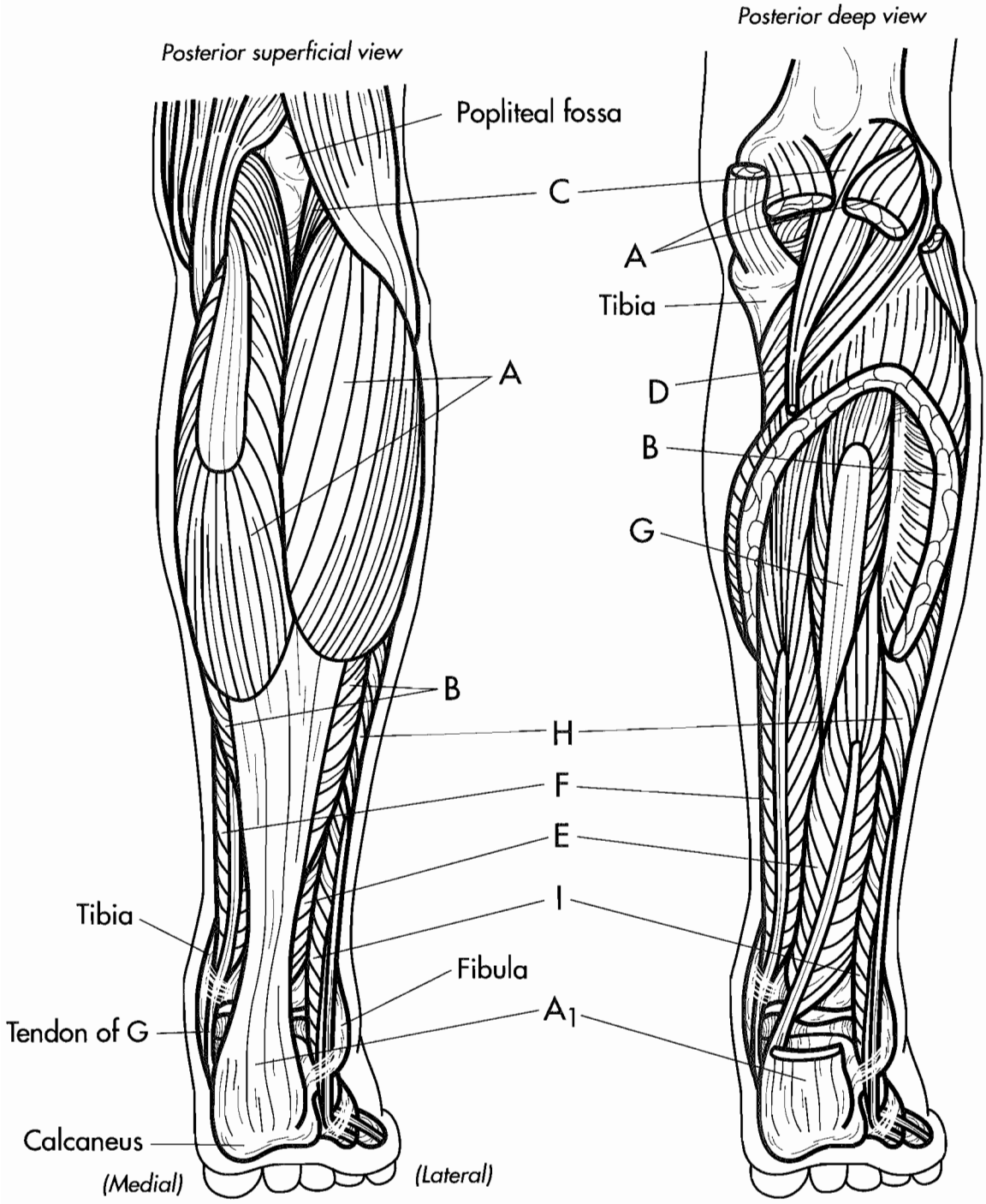
Inferior gemellus	L	❍
Obturator externus	M	❍
Gluteus medius	O	❍
Gastrocnemius	a	❍
Plantaris	b	❍

MUSCLES OF THE LOWER LEG (ANTERIOR AND LATERAL)



Tibialis anterior	A	○	Gastrocnemius	G	○	Quadriceps femoris	a	○
Extensor hallucis longus	B	○	Calcaneal tendon	G_1	○	Tendon	a_1	○
Extensor digitorum longus	C	○	Soleus	H	○	Fascia latae	b	○
Peroneus tertius	D	○	Plantaris	I	○	Biceps femoris	c	○
Peroneus longus	E	○	Flexor digitorum longus	J	○			
Peroneus brevis	F	○	Extensor digitorum brevis	K	○			

MUSCLES OF THE LOWER LEG (POSTERIOR)



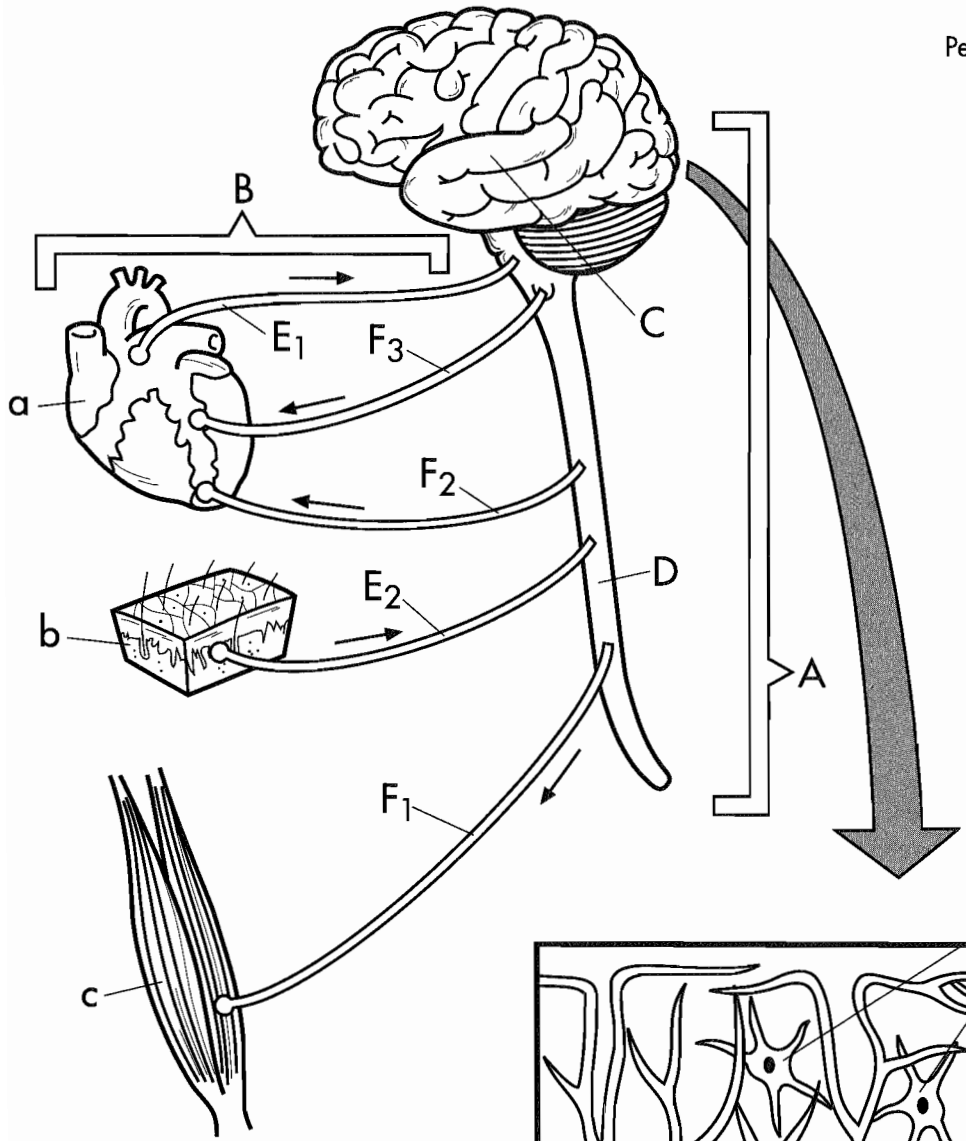
Gastrocnemius	A	○
Calcaneal tendon	A_1	○
Soleus	B	○
Plantaris	C	○
Popliteus	D	○

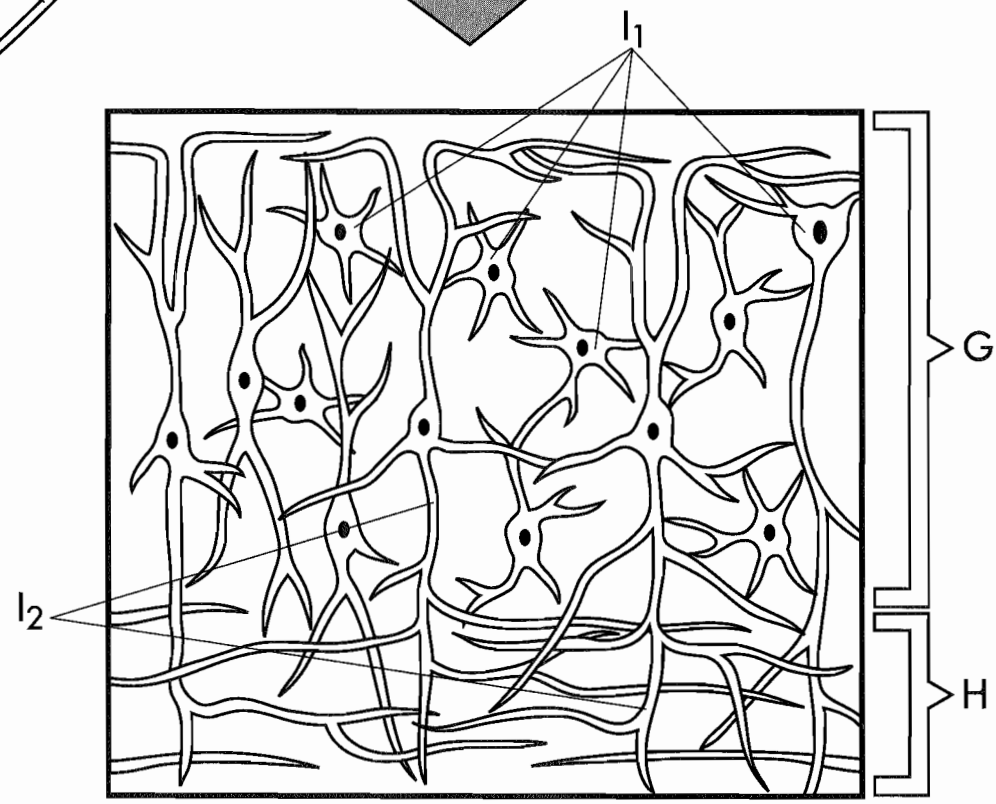
Flexor hallucis longus	E	○
Flexor digitorum longus	F	○
Tibialis posterior	G	○
Peroneus longus	H	○
Peroneus brevis	I	○

CHAPTER FIVE:

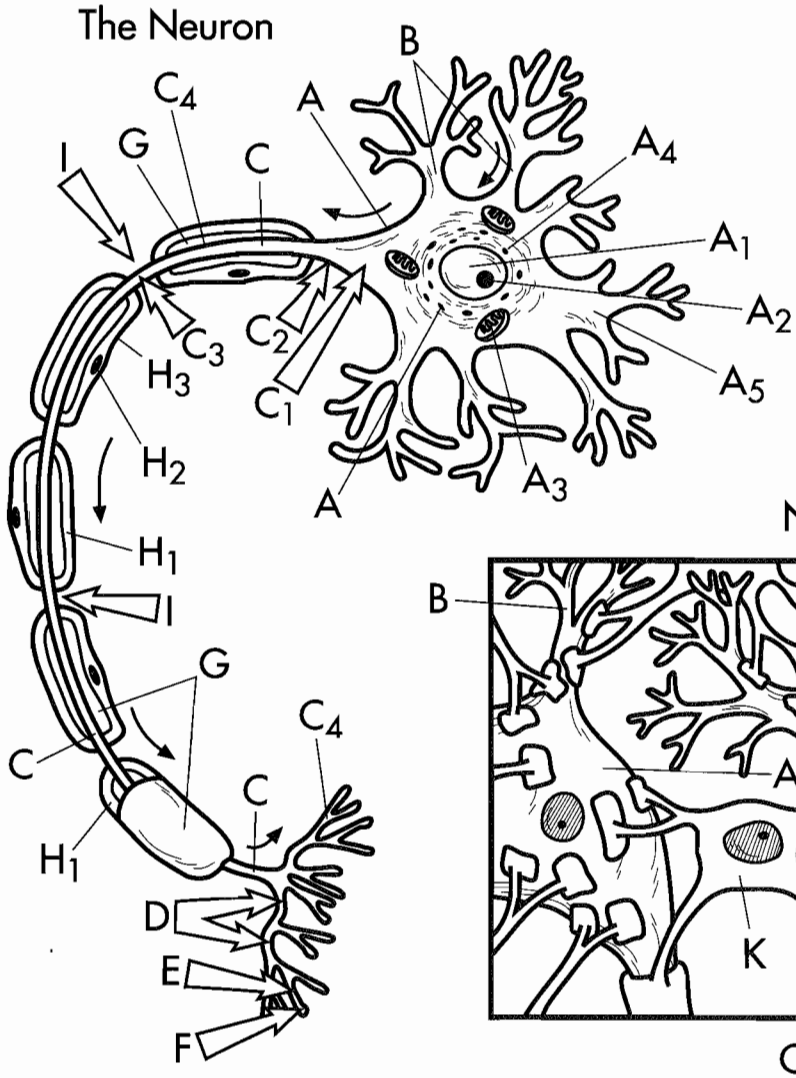
the NERVOUS SYSTEM

Central nervous system	A	○
Peripheral nervous system	B	○
Brain	C	○
Spinal cord	D	○
Visceral sensory nerves	E_1	○
Somatic sensory nerves	E_2	○
Somatic motor nerve	F_1	○
Sympathetic nerve	F_2	○
Parasympathetic nerve	F_3	○
Gray matter	G	○
White matter	H	○
Cell bodies	I_1	○
Axons	I_2	○
Heart	a	○
Skin senses	b	○
Skeletal muscle	c	○



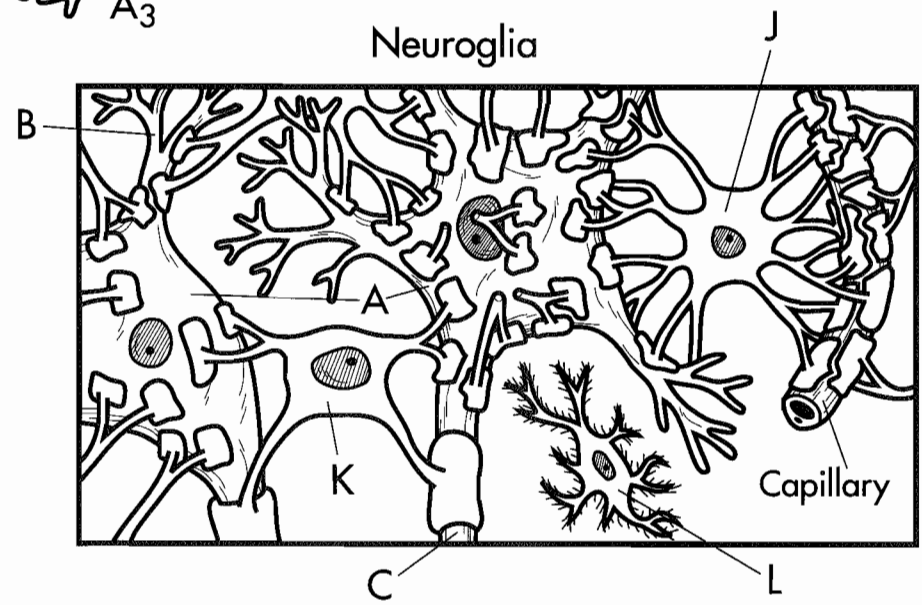


The Neuron



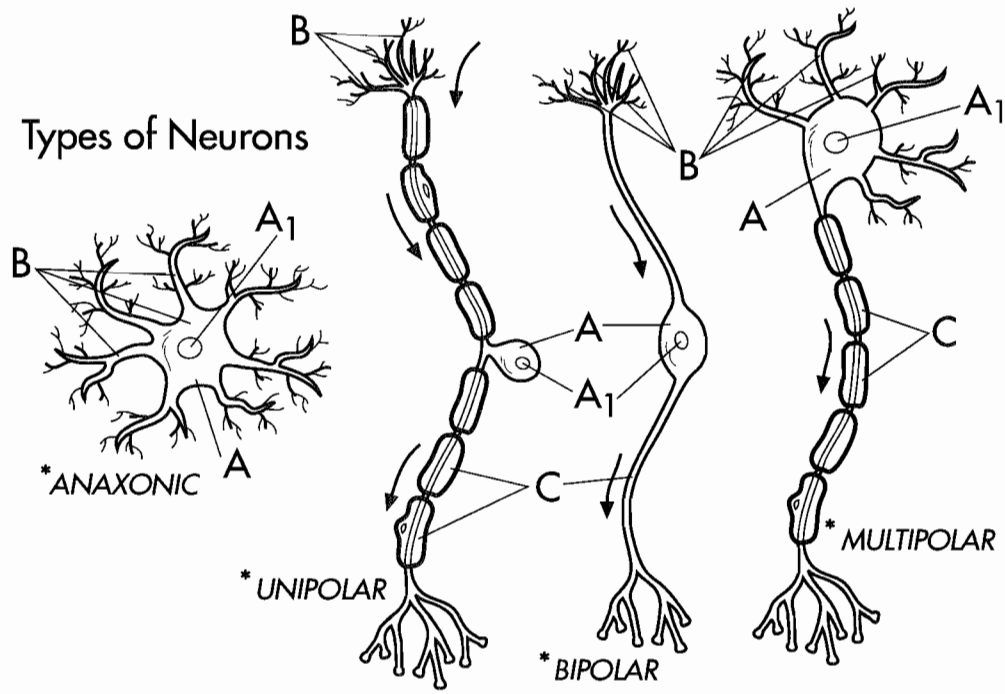
Myelin sheath	G	○
Schwann cells (neurolemmocytes)	H	○
Cytoplasm of Schwann cell	H_1	○
Nucleus of the cell	H_2	○
Neurolemma	H_3	○
Nodes of Ranvier	I	○
Astrocytes	J	○
Oligodendrocytes	K	○
Microglia	L	○

Neuroglia

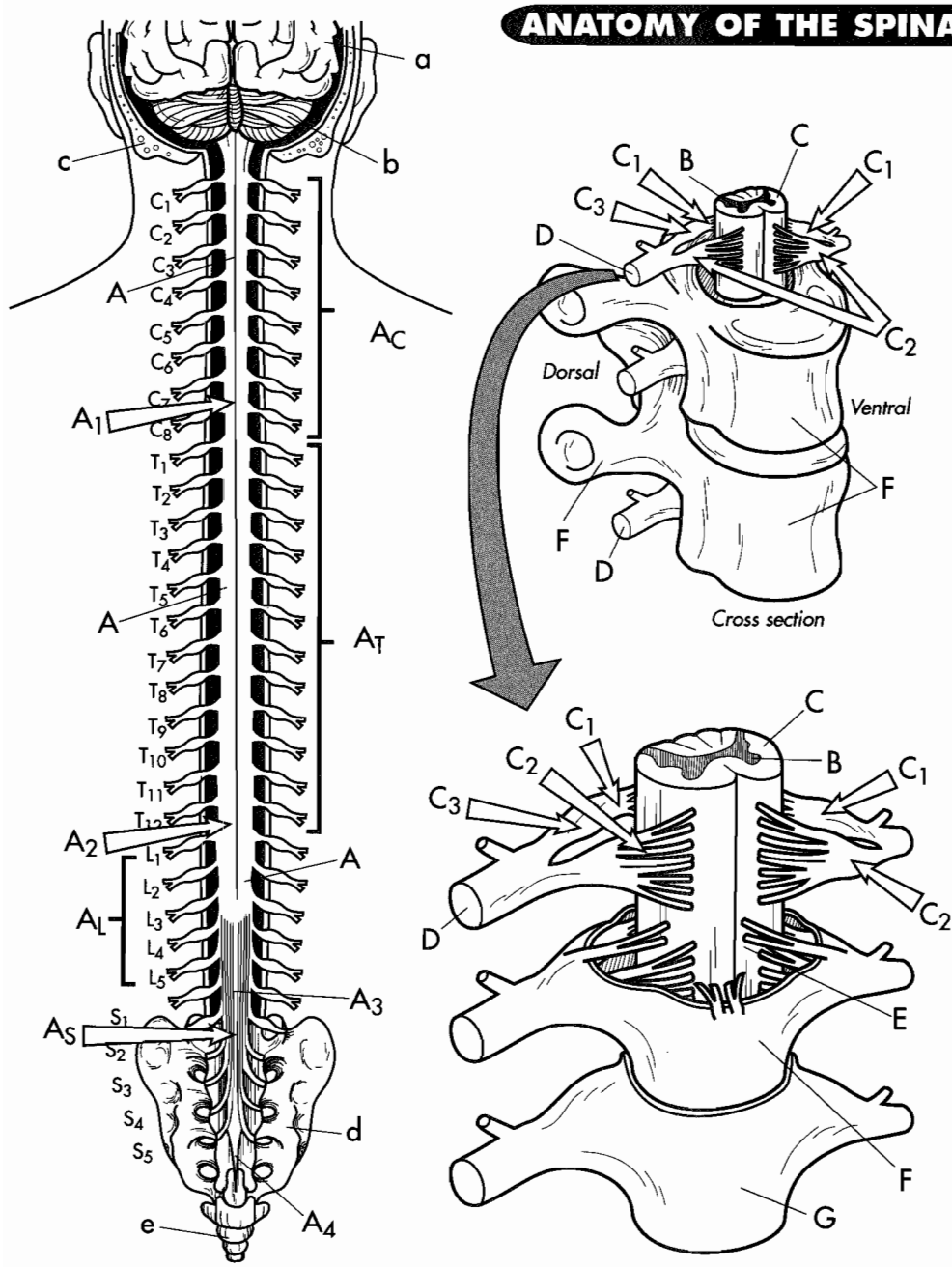


Cell body	A	○
Nucleus	A_1	○
Nucleolus	A_2	○
Mitochondrion	A_3	○
Nissl body	A_4	○
Neurofibril	A_5	○
Dendrites	B	○
Axon	C	○
Axon hillock	C_1	○
Initial segment	C_2	○
Axis cylinder	C_3	○
Axolemma	C_4	○
Telodendria	D	○
Axon terminals	E	○
End bulbs	F	○

Types of Neurons

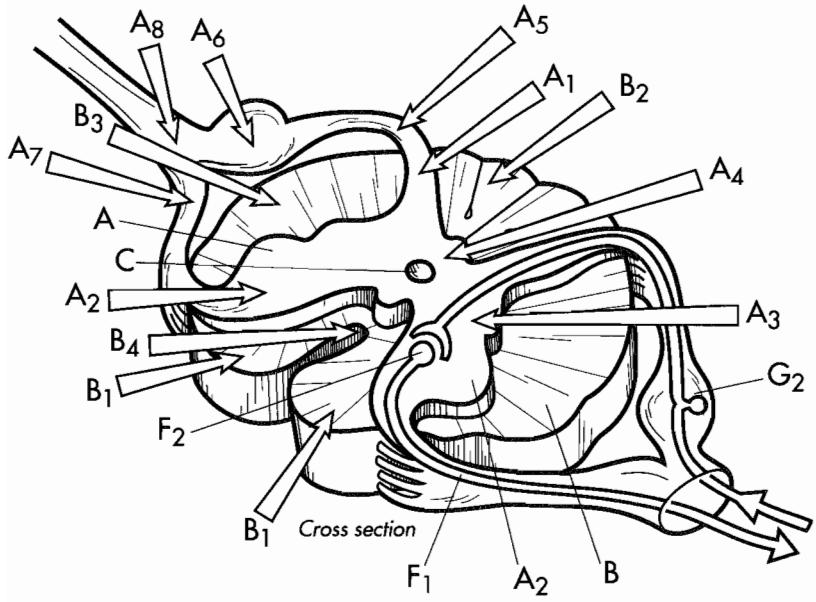


ANATOMY OF THE SPINAL CORD

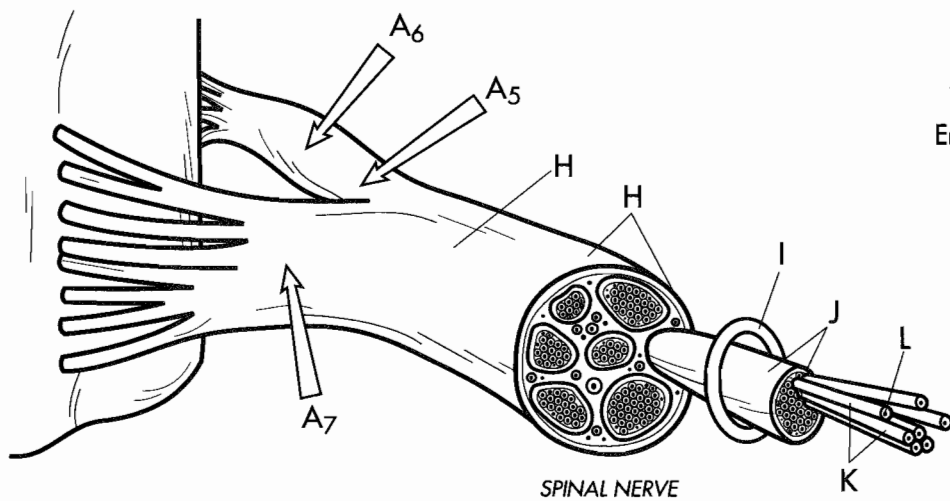


Spinal cord	A	❍
Cervical enlargement	A_1	❍
Lumbar enlargement	A_2	❍
Conus medullaris	A_3	❍
Filum terminal	A_4	❍
Cervical segment	A_C	❍
Thoracic segment	A_T	❍
Lumbar segment	A_L	❍
Sacral segment	A_S	❍

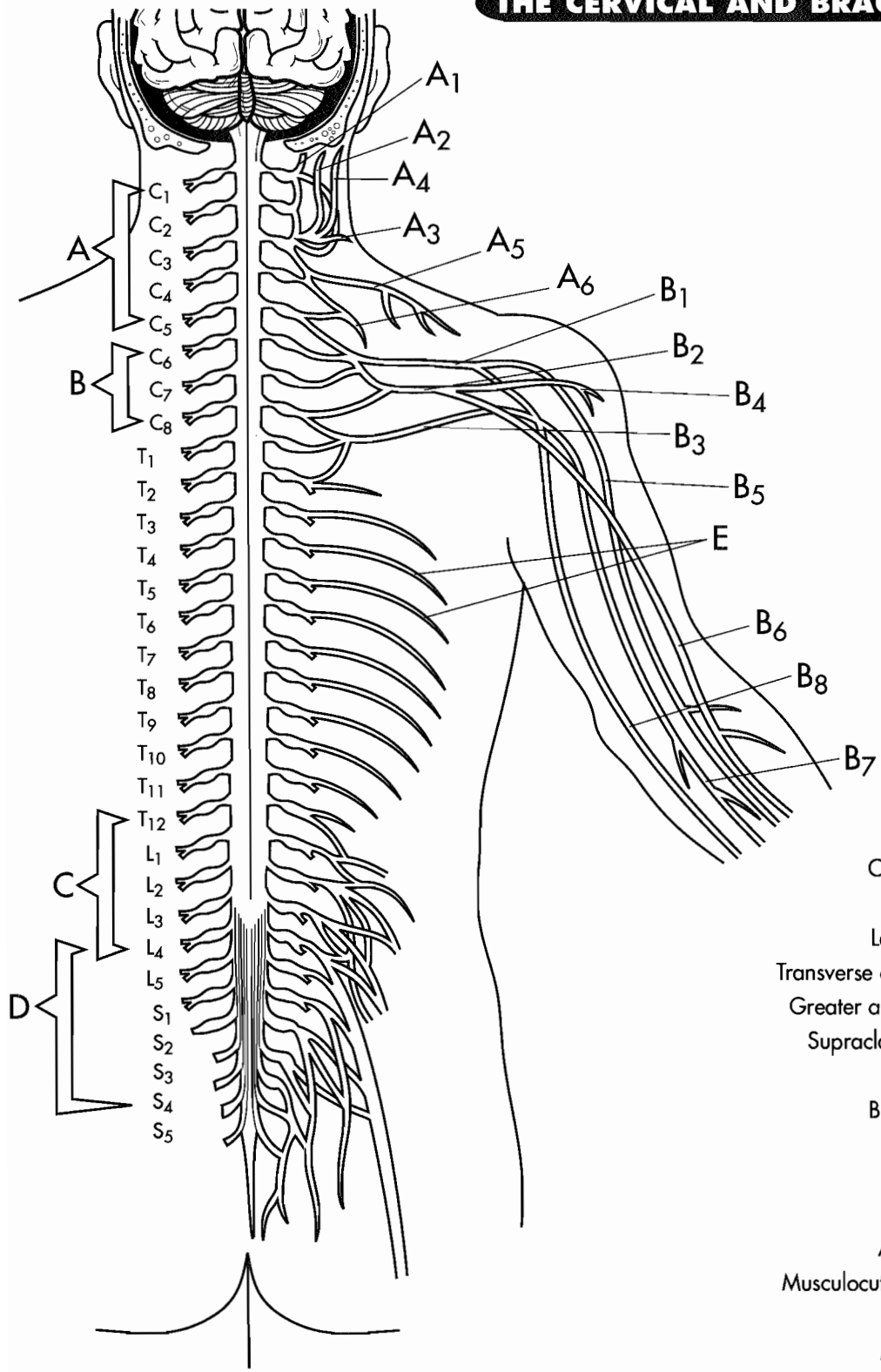
Gray matter	B	❍
White matter	C	❍
Dorsal root	C_1	❍
Ventral root	C_2	❍
Dorsal root ganglion	C_3	❍
Spinal nerve	D	❍
Pia mater	E	❍
Arachnoid	F	❍
Dura mater	G	❍
Cerebrum	a	❍
Cerebellum	b	❍
Occipital bone	c	❍
Sacrum	d	❍
Coccyx	e	❍



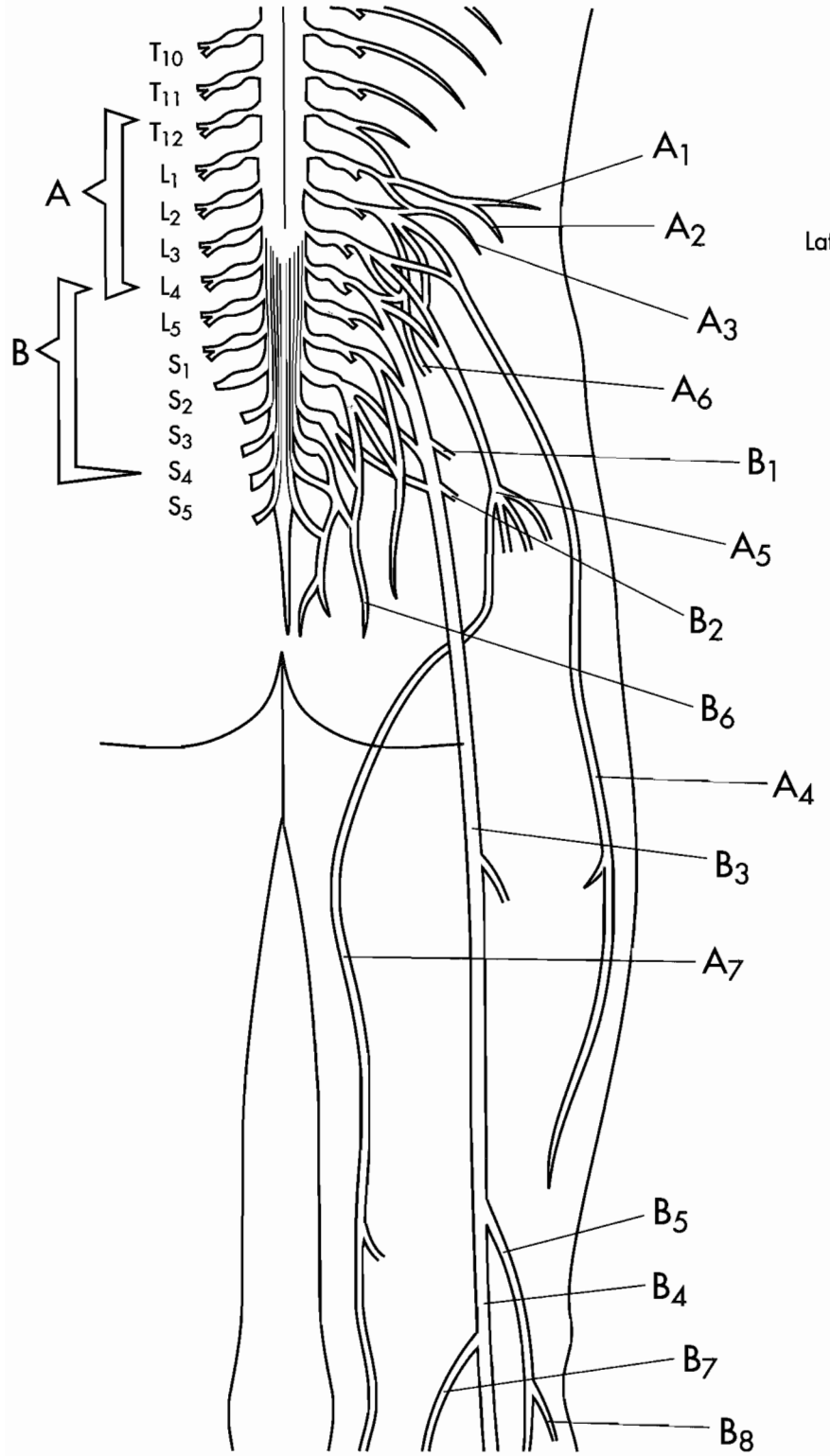
Gray matter	A	○
Dorsal gray horn	A_1	○
Ventral gray horns	A_2	○
Lateral gray horn	A_3	○
Gray commissure	A_4	○
Dorsal root	A_5	○
Dorsal root ganglion	A_6	○
Ventral root	A_7	○
Spinal nerve	A_8	○
Spinal cord	B	○
Ventral white columns	B_1	○
Dorsal white columns	B_2	○
Lateral white columns	B_3	○
Anterior white commissure	B_4	○
Central canal	C	○
Motor axons	F_1	○
Motor neuron	F_2	○
Dorsal root ganglion	G_2	○
Epineurium	H	○
Fascicle	I	○
Perineurium	J	○
Endoneurium	K	○
Axon	L	○



THE CERVICAL AND BRACHIAL PLEXUSES

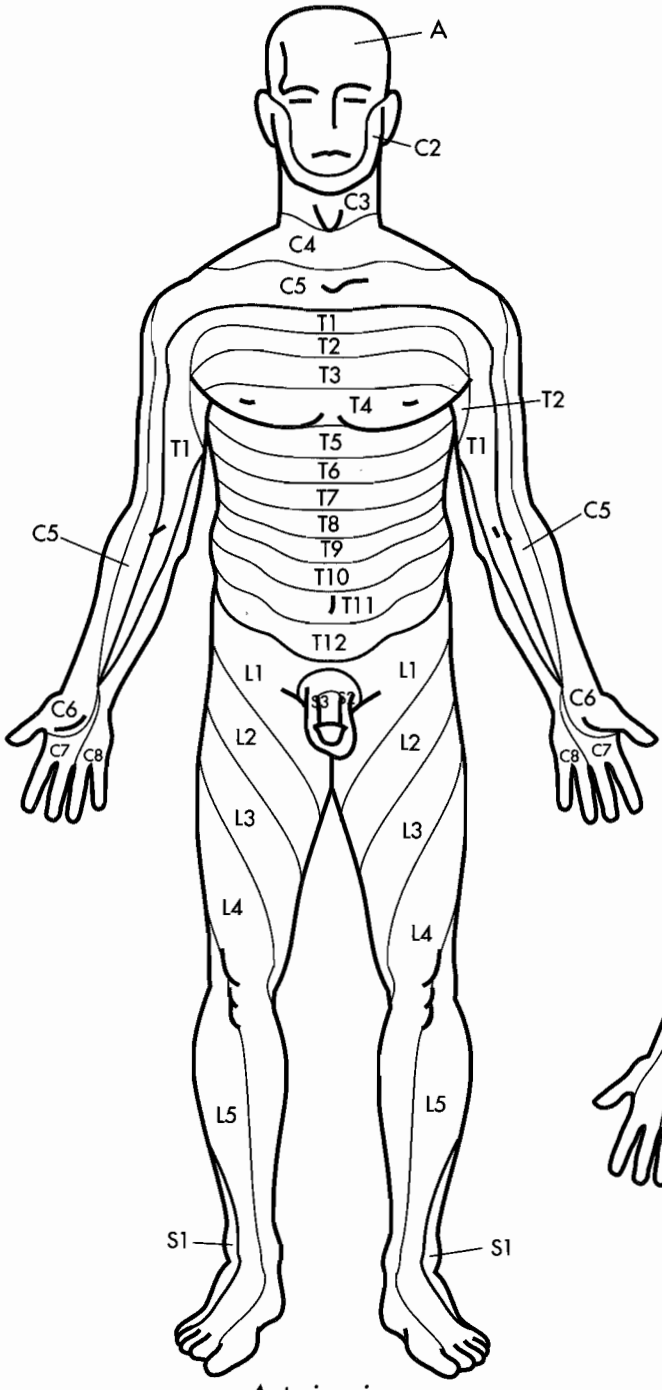


Cervical plexus	A	○
Ansa cervalis	A_1	○
Lesser occipital	A_2	○
Transverse cervical nerve	A_3	○
Greater auricular nerve	A_4	○
Supraclavicular nerve	A_5	○
Phrenic nerve	A_6	○
Brachial plexus	B	○
Lateral cord	B_1	○
Posterior cord	B_2	○
Medial cord	B_3	○
Axillary nerve	B_4	○
Musculocutaneous nerve	B_5	○
Radial nerve	B_6	○
Median nerve	B_7	○
Ulnar nerve	B_8	○
Lumbar plexus	C	○
Sacral plexus	D	○
Ventral rami	E	○

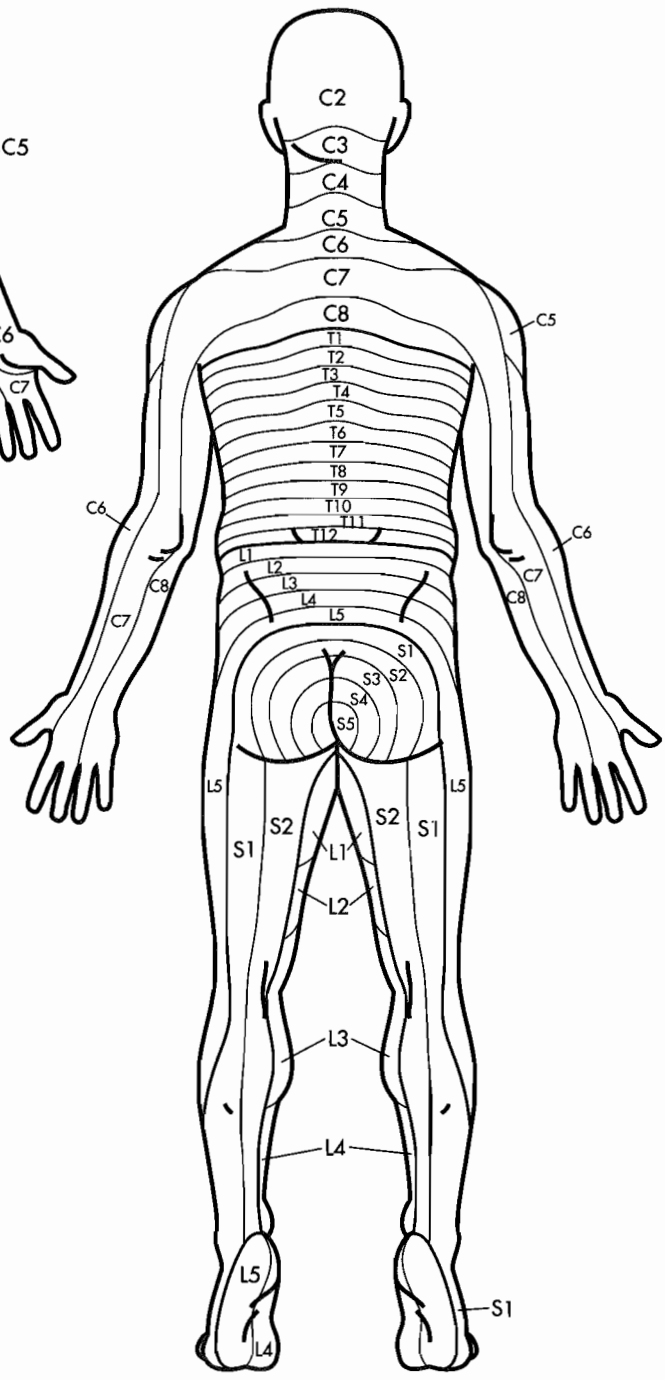


Lumbar plexus	A	❍
Iliohypogastric nerve	A_1	❍
Ilioinguinal nerve	A_2	❍
Genitofemoral nerve	A_3	❍
Lateral femoral cutaneous nerve	A_4	❍
Femoral nerve	A_5	❍
Obturator nerve	A_6	❍
Saphenous nerve	A_7	❍
Sacral plexus	B	❍
Superior gluteal nerve	B_1	❍
Inferior gluteal nerve	B_2	❍
Sciatic nerve	B_3	❍
Tibial nerve	B_4	❍
Perineal nerve	B_5	❍
Pudendal nerve	B_6	❍
Medial sural cutaneous nerve	B_7	❍
Lateral sural cutaneous nerve	B_8	❍

Cranial nerve V (trigeminal nerve)	A	○
Cervical dermatomes	C_{2-8}	○
Lumbar dermatomes	L_{1-5}	○
Sacral dermatomes	S_{1-5}	○
Thoracic dermatomes	T_{1-12}	○

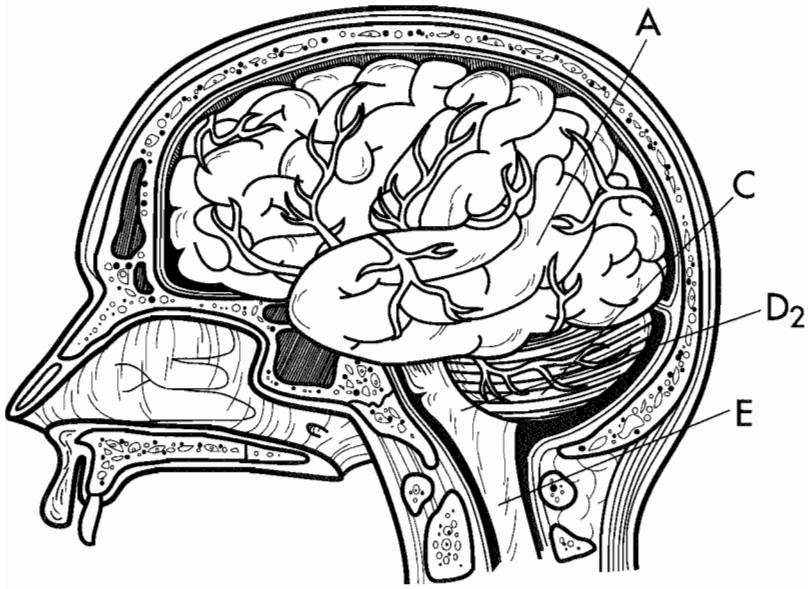


Anterior view

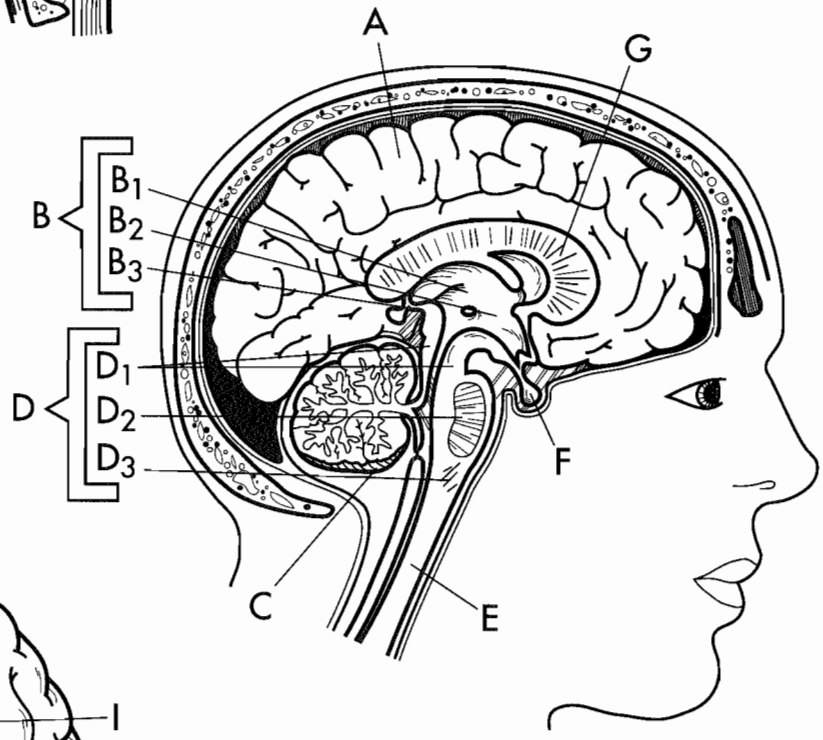


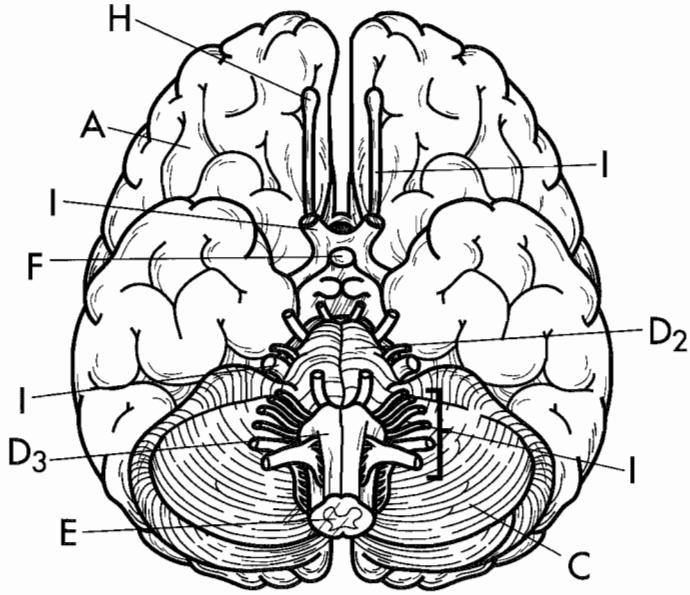
Posterior view

OVERVIEW OF THE BRAIN

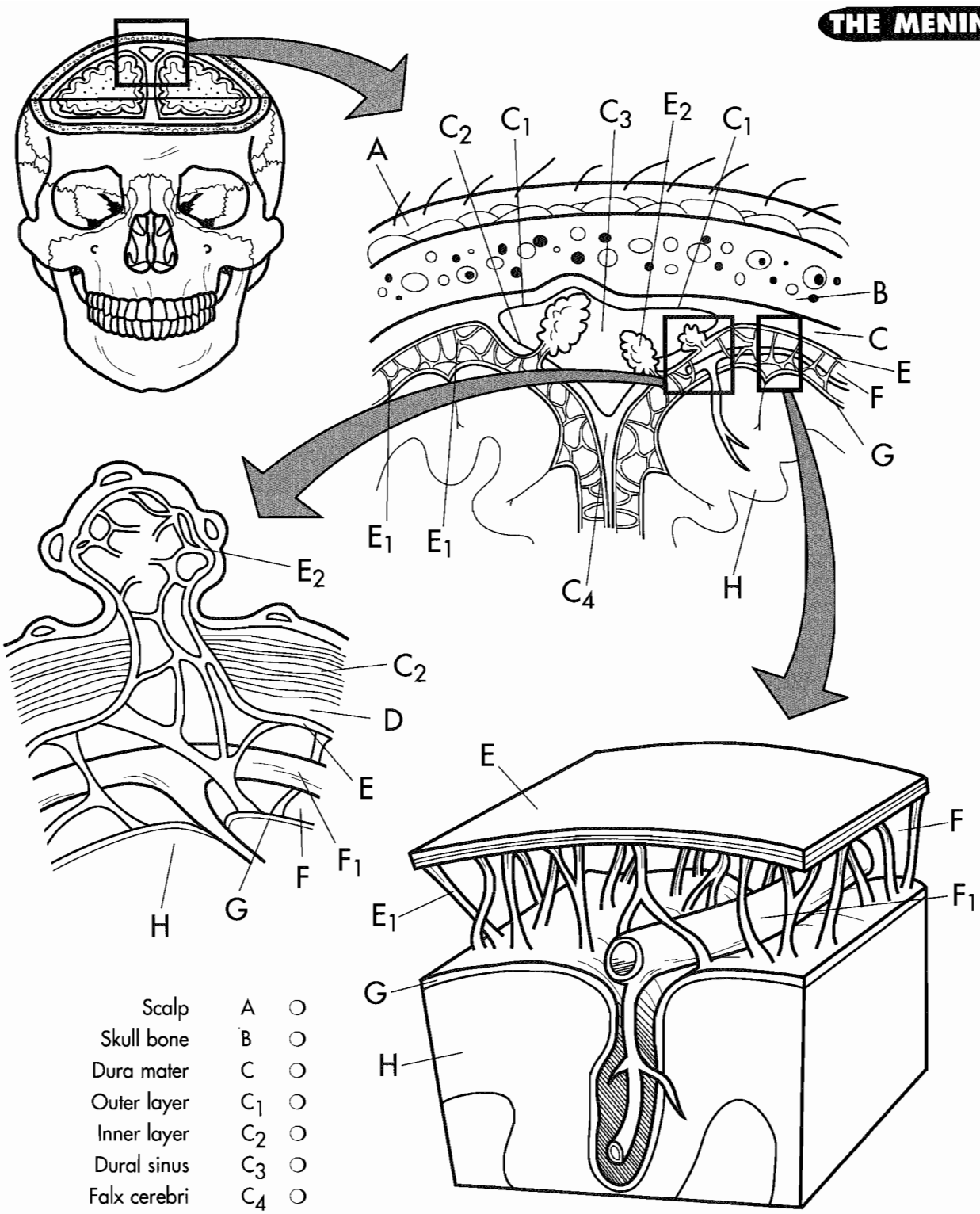


Cerebrum	A	○
Diencephalon	B	○
Thalamus	B_1	○
Hypothalamus	B_2	○
Epithalamus	B_3	○
Cerebellum	C	○
Brain stem	D	○
Midbrain	D_1	○
Pons	D_2	○



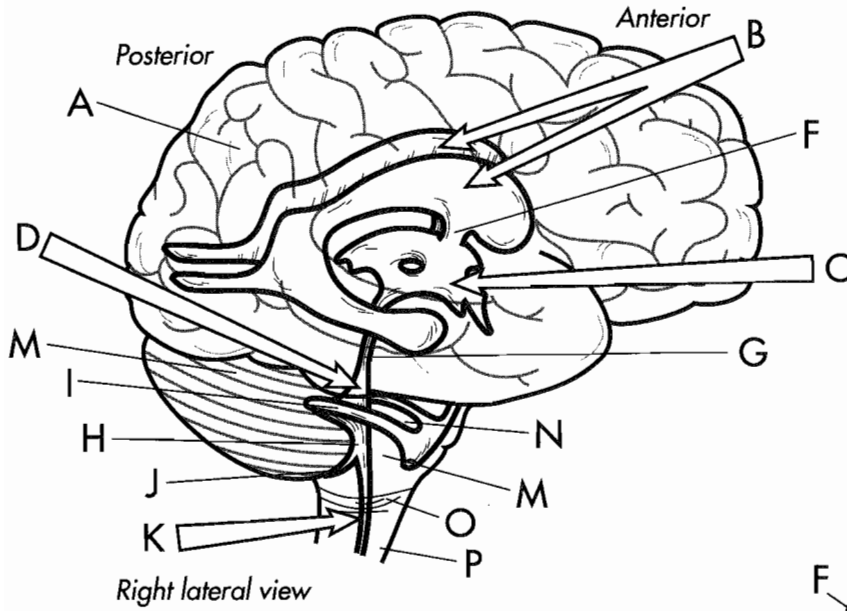


Medulla oblongata	D_3	○
Spinal cord	E	○
Pituitary gland	F	○
Corpus callosum	G	○
Olfactory bulbs	H	○
Cranial nerves	I	○

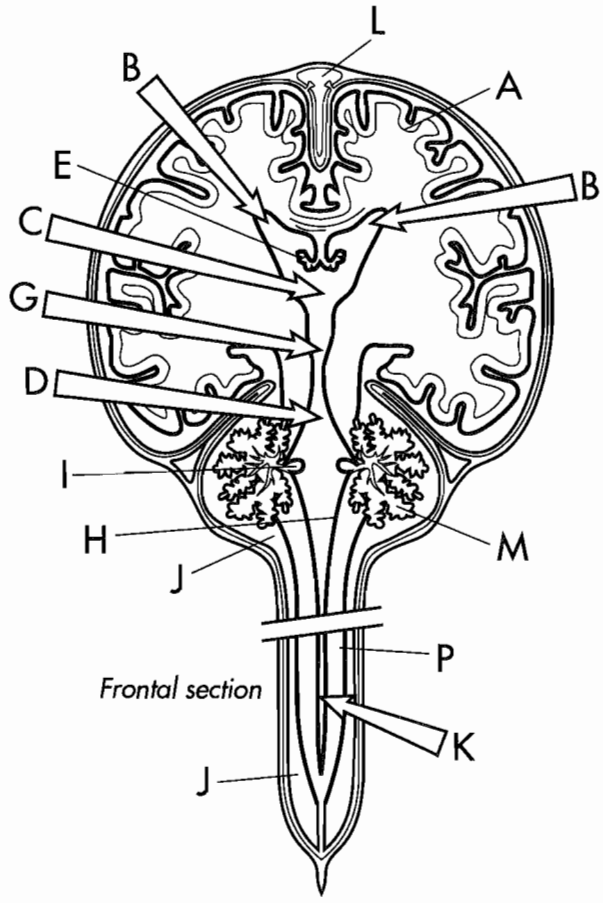


Scalp	A	○
Skull bone	B	○
Dura mater	C	○
Outer layer	C_1	○
Inner layer	C_2	○
Dural sinus	C_3	○
Falx cerebri	C_4	○
Subdural space	D	○
Arachnoid	E	○
Arachnoid trabeculae	E_1	○
Arachnoid villus	E_2	○
Subarachnoid space	F	○
Blood vessels	F_1	○
Pia mater	G	○
Cerebral cortex	H	○

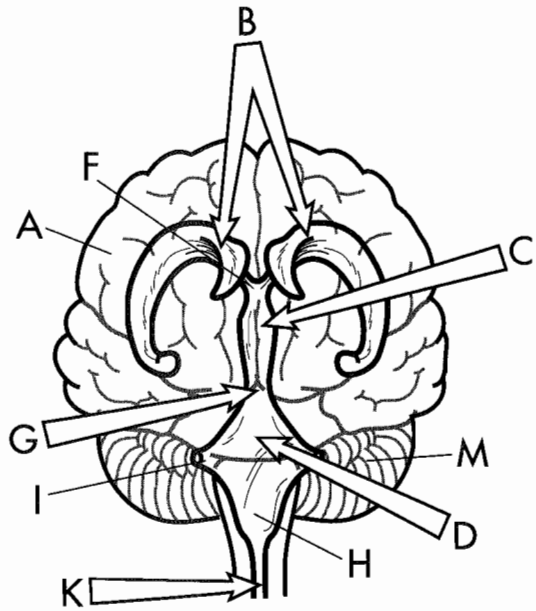
VENTRICLES OF THE BRAIN



Right lateral view

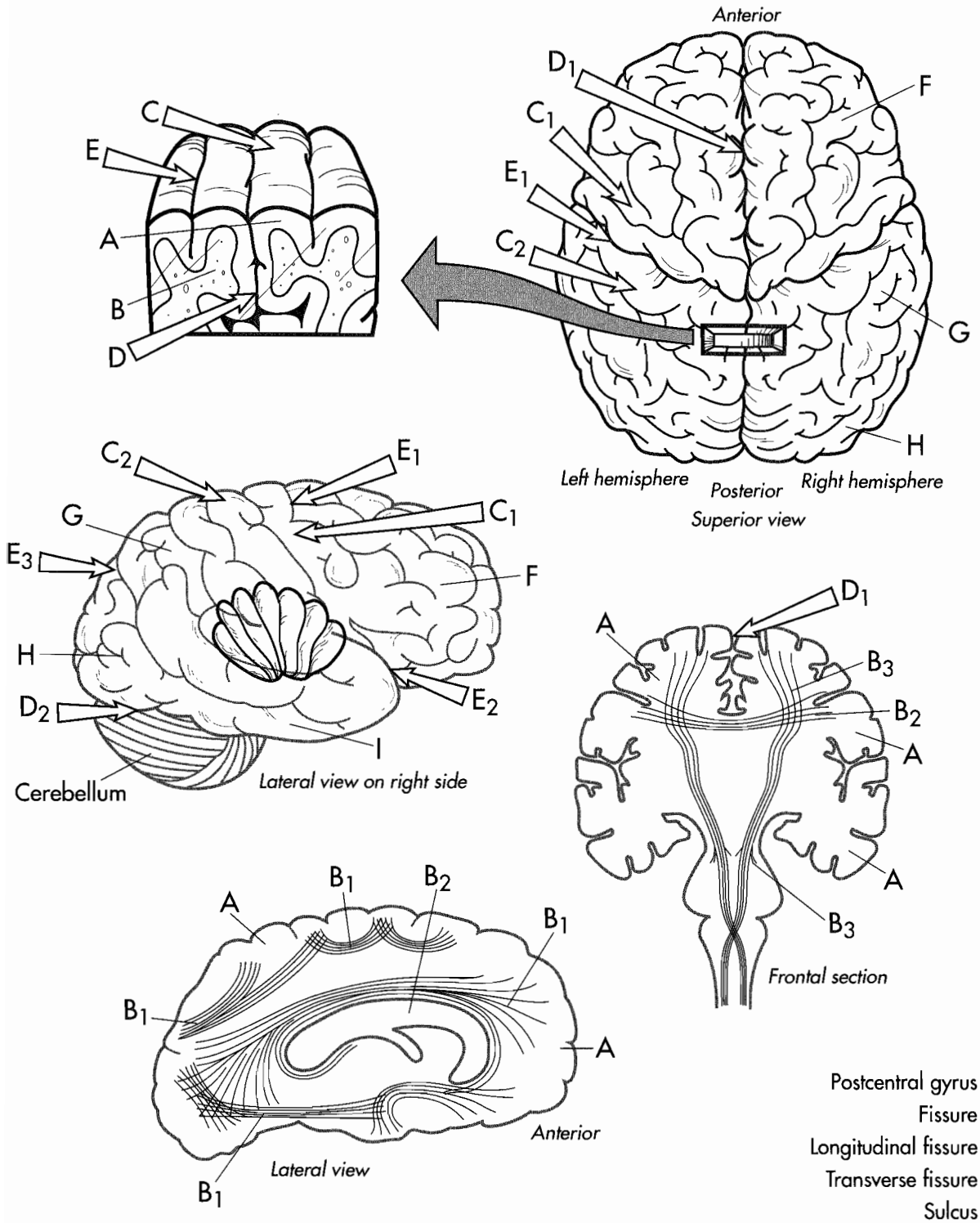


Frontal section

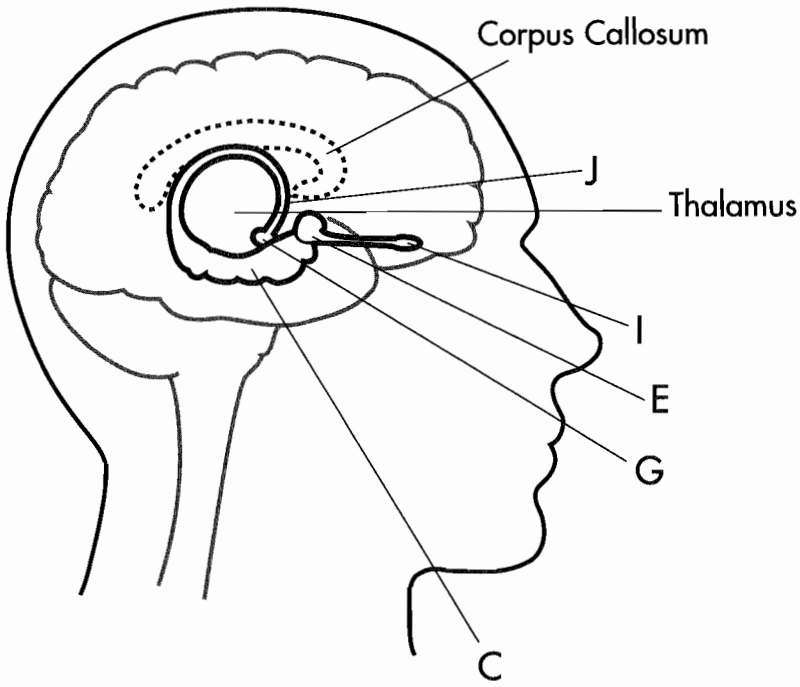


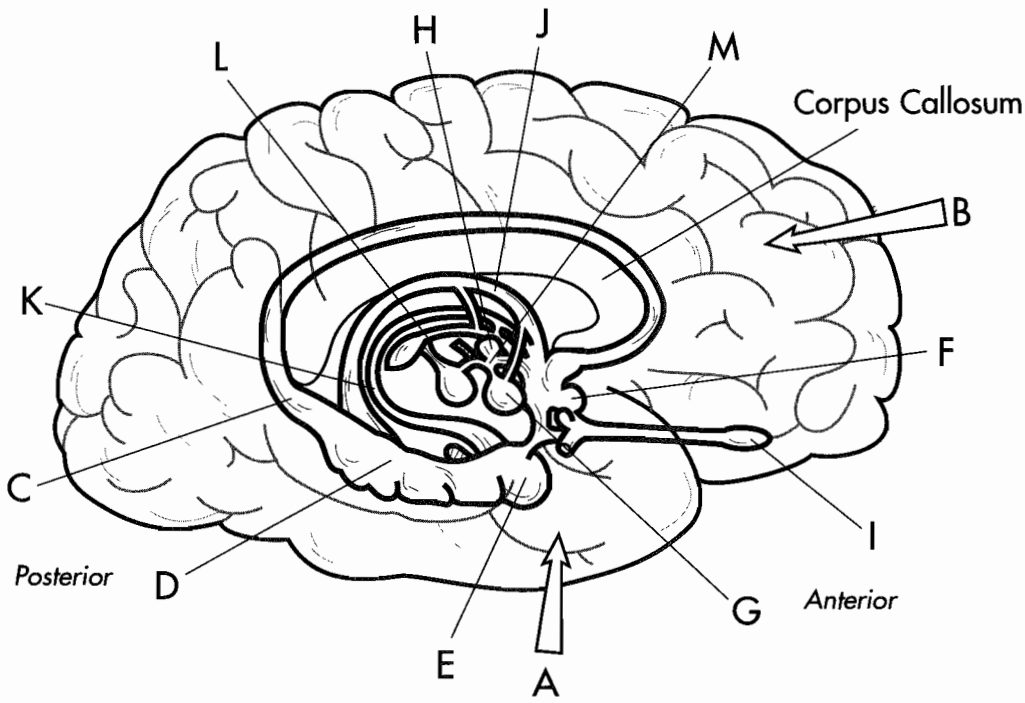
Anterior view

Cerebrum	A	○
Lateral ventricles	B	○
Third ventricle	C	○
Fourth ventricle	D	○
Choroid plexus	E	○
Interventricular foramina	F	○
Cerebral aqueduct	G	○
Single median aperture	H	○
Lateral apertures	I	○
Subarachnoid space	J	○
Spinal cord central canal	K	○
Superior sagittal sinus	L	○
Cerebellum	M	○
Pons	N	○
Medulla oblongata	O	○
Spinal cord	P	○



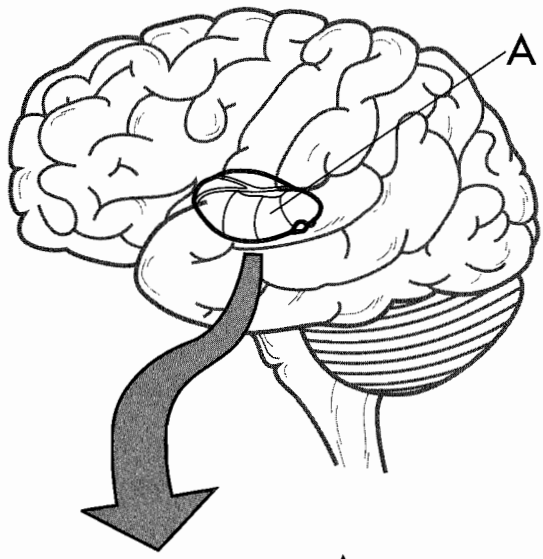
Gray matter	A	○
White matter	B	○
Association fibers	B_1	○
Commisural fibers	B_2	○
Projection fibers	B_3	○
Gyrus	C	○
Precentral gyrus	C_1	○
Postcentral gyrus	C_2	○
Fissure	D	○
Longitudinal fissure	D_1	○
Transverse fissure	D_2	○
Sulcus	E	○
Central sulcus	E_1	○
Lateral cerebral sulcus (fissure)	E_2	○
Parieto-occipital sulcus	E_3	○
Frontal lobe	F	○
Parietal lobe	G	○
Occipital lobe	H	○
Temporal lobe	I	○

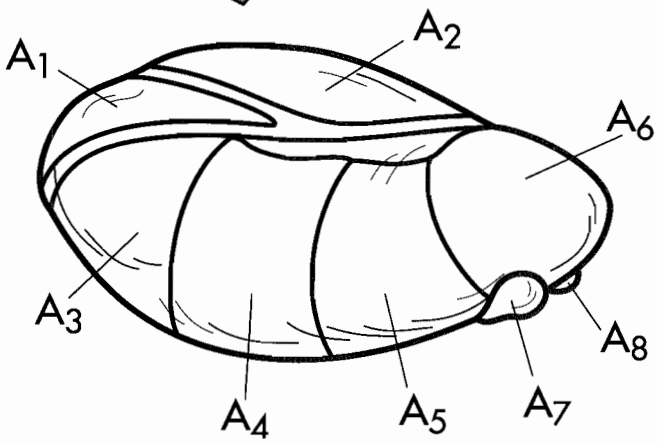




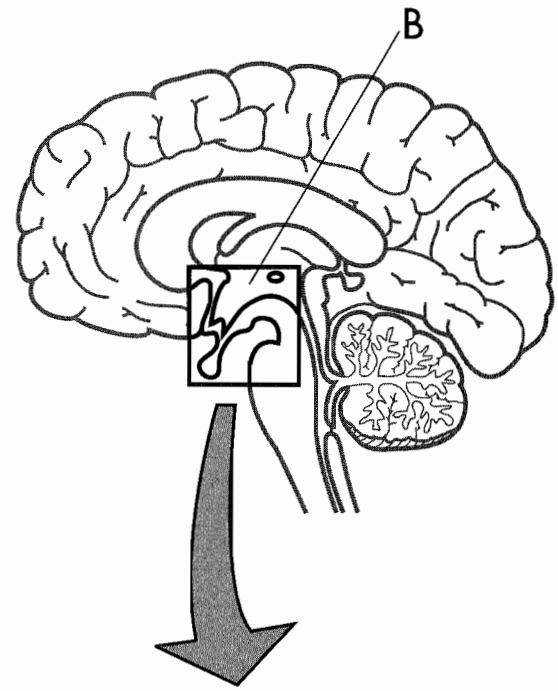
Parahippocampal gyrus	A	❍	Anterior nucleus	H	❍
Singulate gyrus	B	❍	Olfactory bulb	I	❍
Hippocampus	C	❍	Fornix	J	❍
Dentate gyrus	D	❍	Stria terminalis	K	❍
Amygdala	E	❍	Stria medullaris	L	❍
Septal nuclei	F	❍	Mammilothalamic tract	M	❍
Mammillary bodies	G	❍			

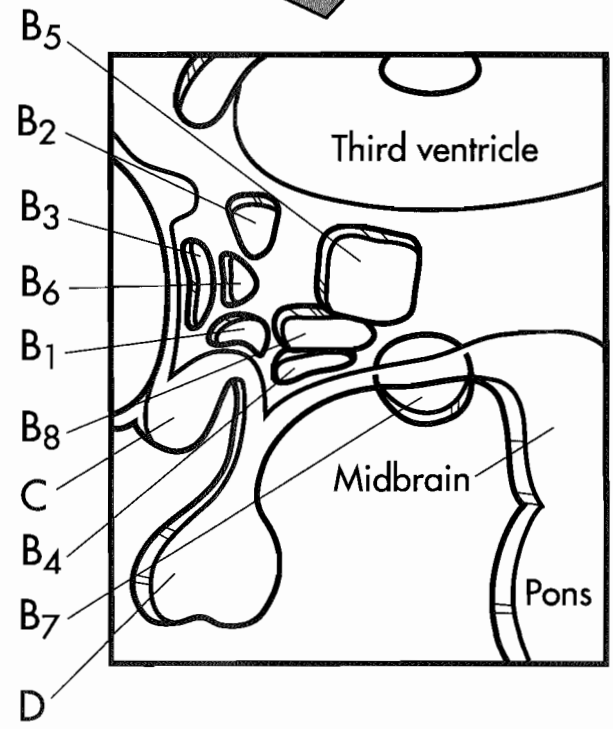
THE DIENCEPHALON

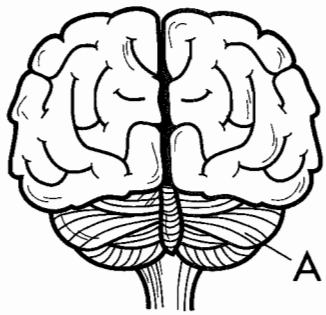




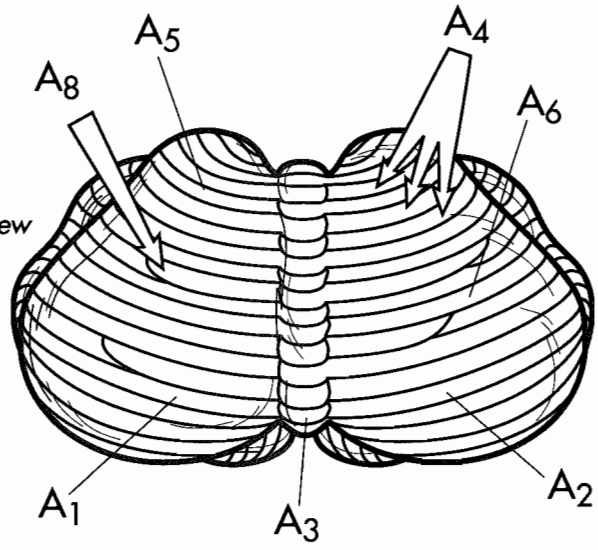
Thalamus	A	○
Anterior nucleus	A_1	○
Medial nucleus	A_2	○
Ventral anterior nucleus	A_3	○
Ventral lateral nucleus	A_4	○
Ventral posterior nucleus	A_5	○
Pulvinar nucleus	A_6	○
Lateral geniculate body	A_7	○
Medial geniculate body	A_8	○
Hypothalamus	B	○
Supraoptic nucleus	B_1	○
Paraventricular nucleus	B_2	○
Preoptic nucleus	B_3	○
Tubural region	B_4	○
Sympathetic region	B_5	○
Parasympathetic region	B_6	○
Mammillary region	B_7	○
Emotional center	B_8	○
Infundibulum	C	○
Pituitary gland	D	○



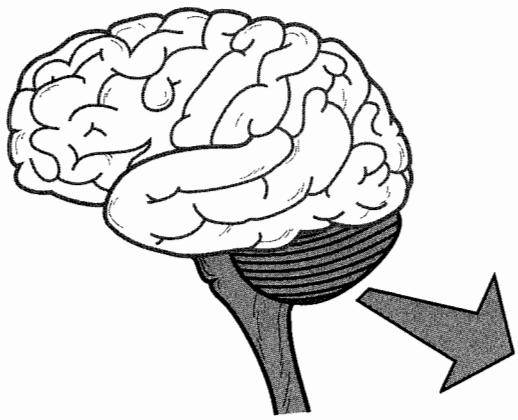


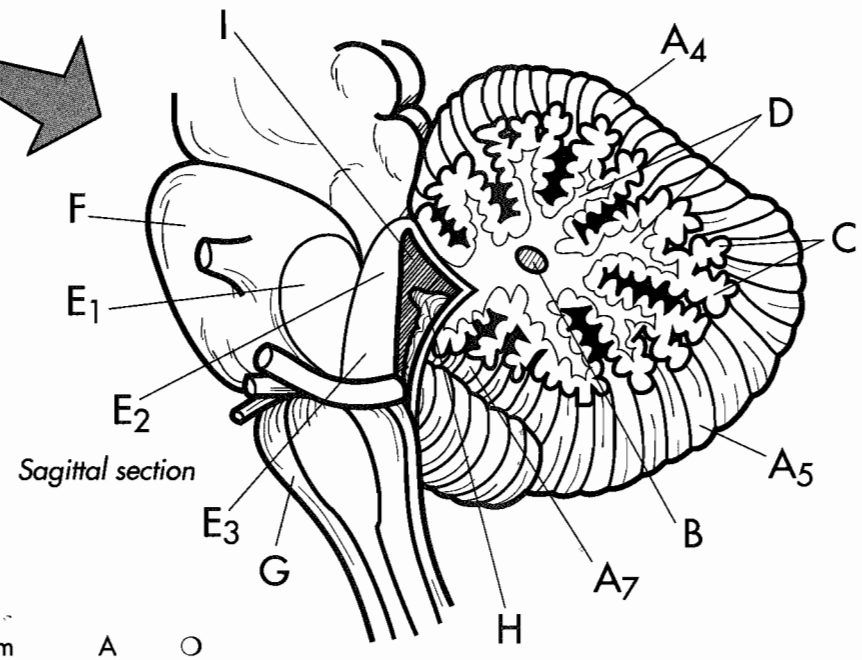


Dorsal view of brain



Superior view

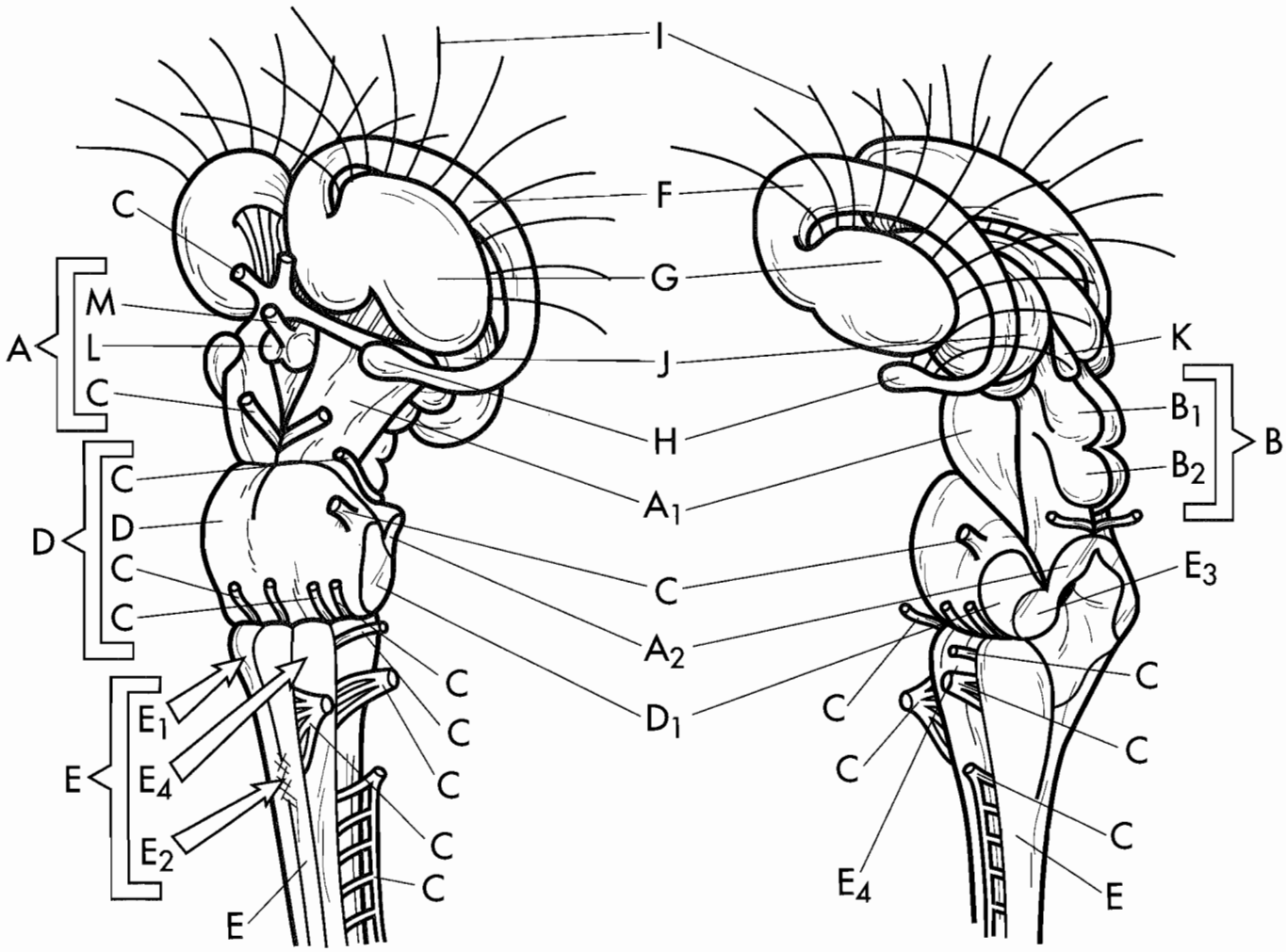




Sagittal section

Cerebellum	A	○
Left cerebellar hemisphere	A_1	○
Right cerebellar hemisphere	A_2	○
Vermis	A_3	○
Folia	A_4	○
Anterior lobe	A_5	○
Posterior lobe	A_6	○
Flocculonodular lobe	A_7	○
Primary fissure	A_8	○
Cerebellar nuclei	B	○
Cortex of the cerebellum	C	○

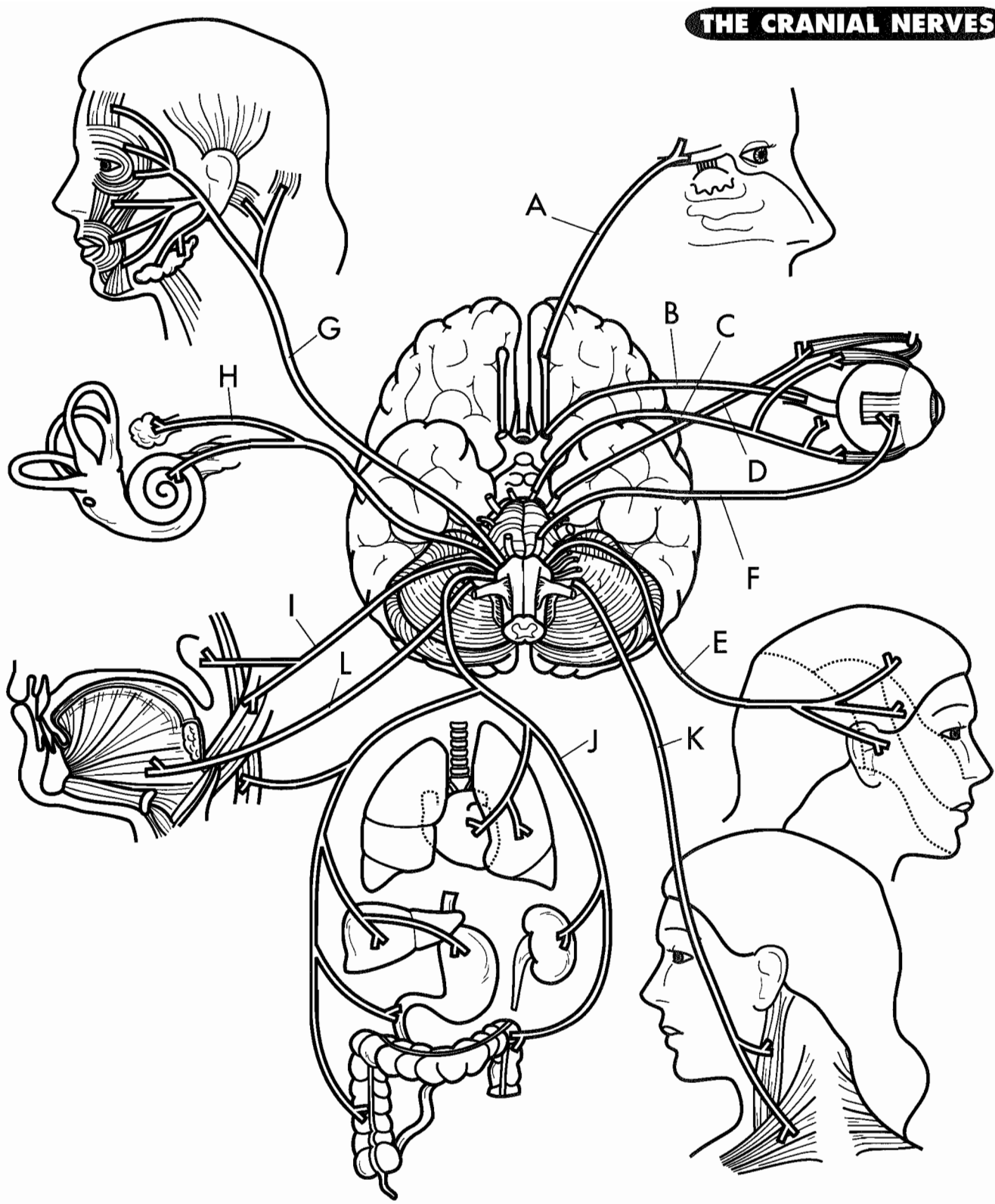
Arbor vitae	D	○
Superior cerebellar peduncles	E_1	○
Middle cerebellar peduncles	E_2	○
Inferior cerebellar peduncles	E_3	○
Pons	F	○
Medulla	G	○
Choroid plexus	H	○
Fourth ventricle	I	○



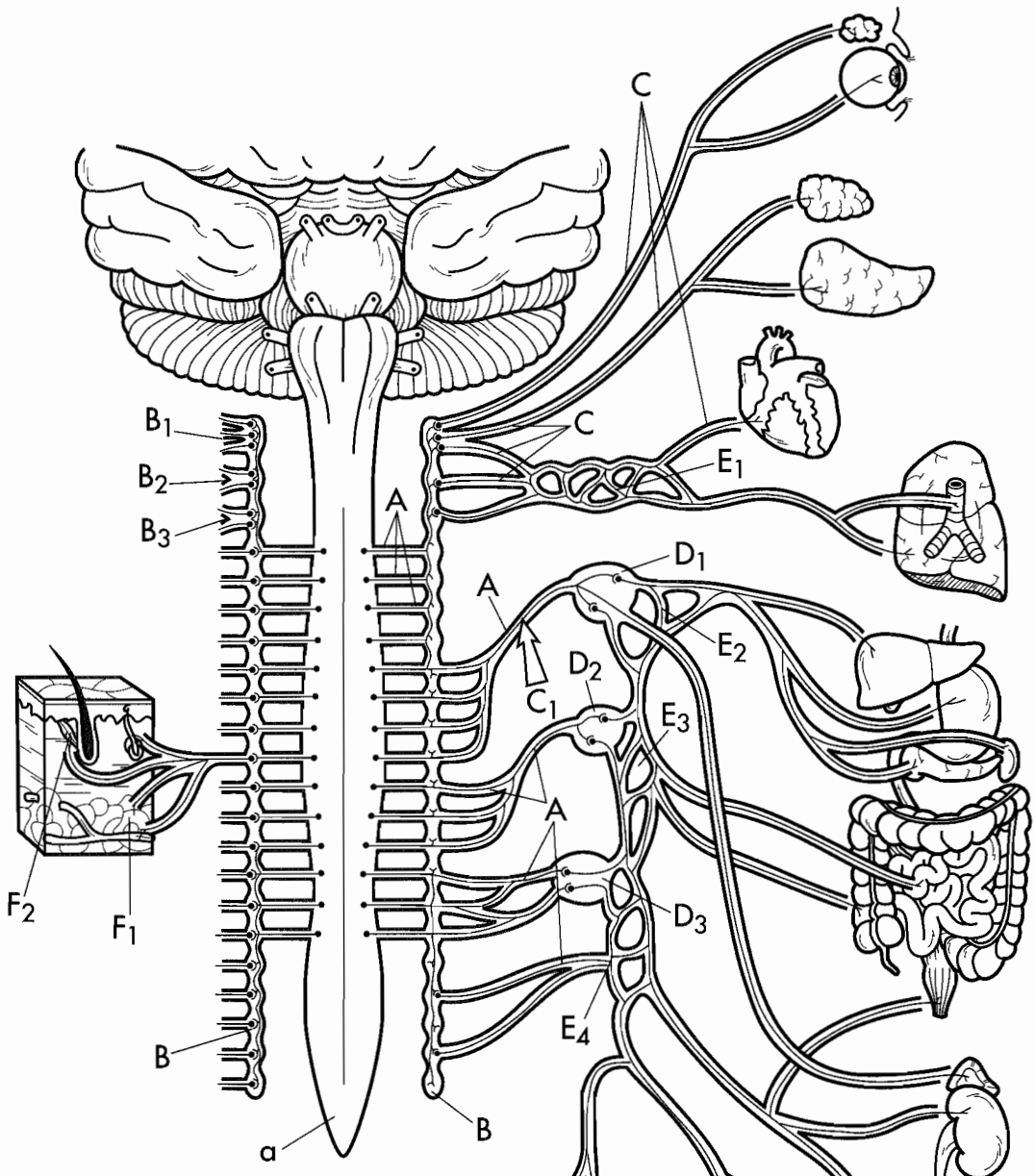
Anterolateral view *Posterolateral view*

Midbrain	A	○
Cerebral peduncles	A_1	○
Superior cerebellar peduncles	A_2	○
Corpora quadrigemina	B	○
Superior colliculi	B_1	○
Inferior colliculi	B_2	○
Cranial nerves	C	○
Pons	D	○
Middle cerebellar peduncles	D_1	○
Medulla oblongata	E	○
Pyramids	E_1	○

Decussation	E_2	○
Inferior cerebellar peduncles	E_3	○
Olives	E_4	○
Caudate nucleus	F	○
Lentiform nucleus	G	○
Amygdala	H	○
Corona radiata	I	○
Thalamus	J	○
Pineal gland	K	○
Mammary body	L	○
Infundibulum	M	○

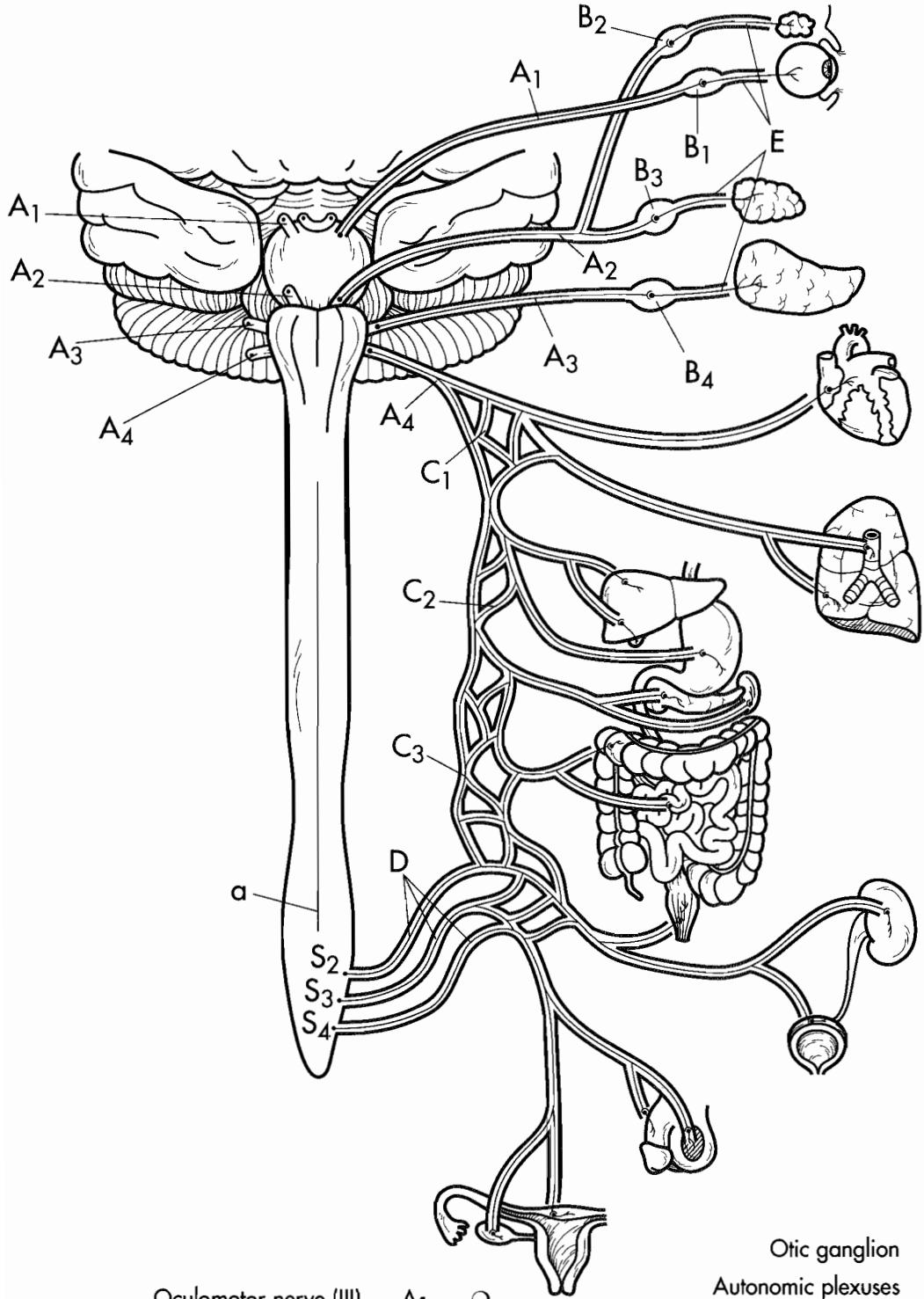


Olfactory nerve	A	○	Facial nerve	G	○
Optic nerve	B	○	Vestibulocochlear nerve	H	○
Oculomotor nerve	C	○	Glossopharyngeal nerve	I	○
Trochlear nerve	D	○	Vagus nerve	J	○
Trigeminal nerve	E	○	Spinal accessory	K	○
Abducens nerve	F	○	Hypoglossal nerve	L	○

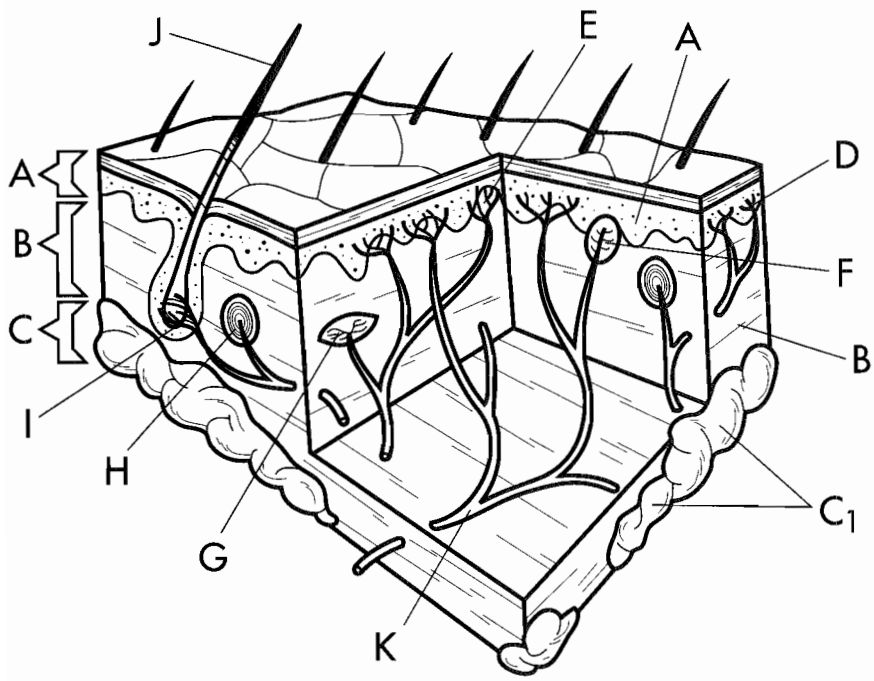


Preganglionic nerve fibers	A	○
Sympathetic (vertebral) ganglia	B	○
Superior cervical ganglion	B_1	○
Middle cervical ganglion	B_2	○
Inferior cervical ganglion	B_3	○
Postganglionic nerve fibers	C	○
Splanchnic nerve	C_1	○
Collateral (Prevertebral) ganglia	D	○
Celiac ganglion	D_1	○
Superior mesenteric ganglion	D_2	○
Inferior mesenteric ganglion	D_3	○
Plexuses	E	○
Cardiopulmonary plexus	E_1	○
Celiac plexus	E_2	○
Superior mesenteric plexus	E_3	○
Inferior mesenteric plexus	E_4	○
Skin blood vessel	F_1	○
Arrector pili muscle	F_2	○
Spinal cord	a	○

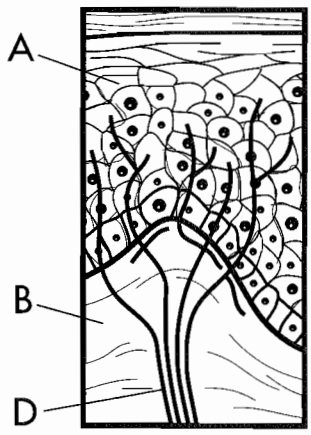
THE AUTONOMIC NERVOUS SYSTEM (PARASYMPATHETIC)

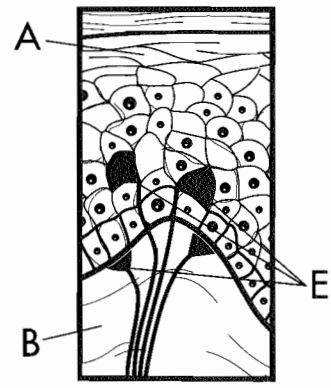


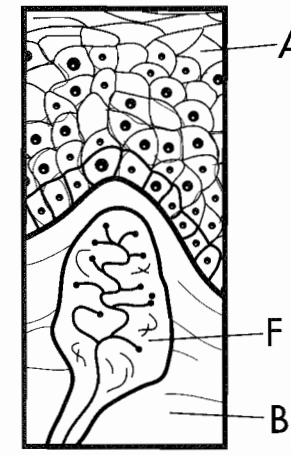
Oculomotor nerve (III) A_1 ○
Facial nerve (VII) A_2 ○
Glossopharyngeal nerve (IX) A_3 ○
Vagus nerve (X) A_4 ○
Terminal ganglia B ○
Ciliary ganglion B_1 ○
Pterygopalatine ganglion B_2 ○
Submandibular ganglion B_3 ○
Otic ganglion B_4 ○
Autonomic plexuses C ○
Cardiopulmonary plexus C_1 ○
Celiac plexus C_2 ○
Hypogastric plexus C_3 ○
Pelvic splanchnic nerves D ○
Postganglionic nerve fibers E ○
Pelvic splanchnic nerves D ○
Sacral nerves S_2-S_4 ○
Spinal cord a ○

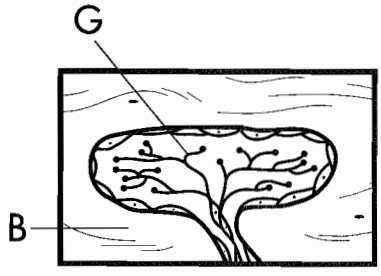


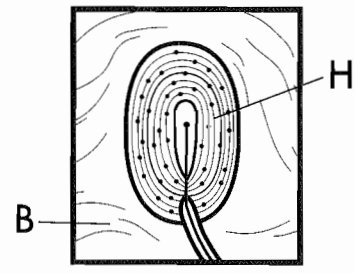
Epidermis	A	○
Dermis	B	○
Hypodermis	C	○
Adipose tissue	C_1	○
Free nerve ending	D	○
Merkel's corpuscles	E	○
Meissner's corpuscles	F	○
Ruffini's corpuscles	G	○
Pacinian corpuscles	H	○
Root hair plexus	I	○
Surface hair	J	○
Sensory nerve fiber	K	○

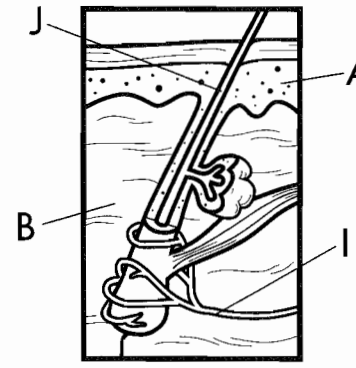


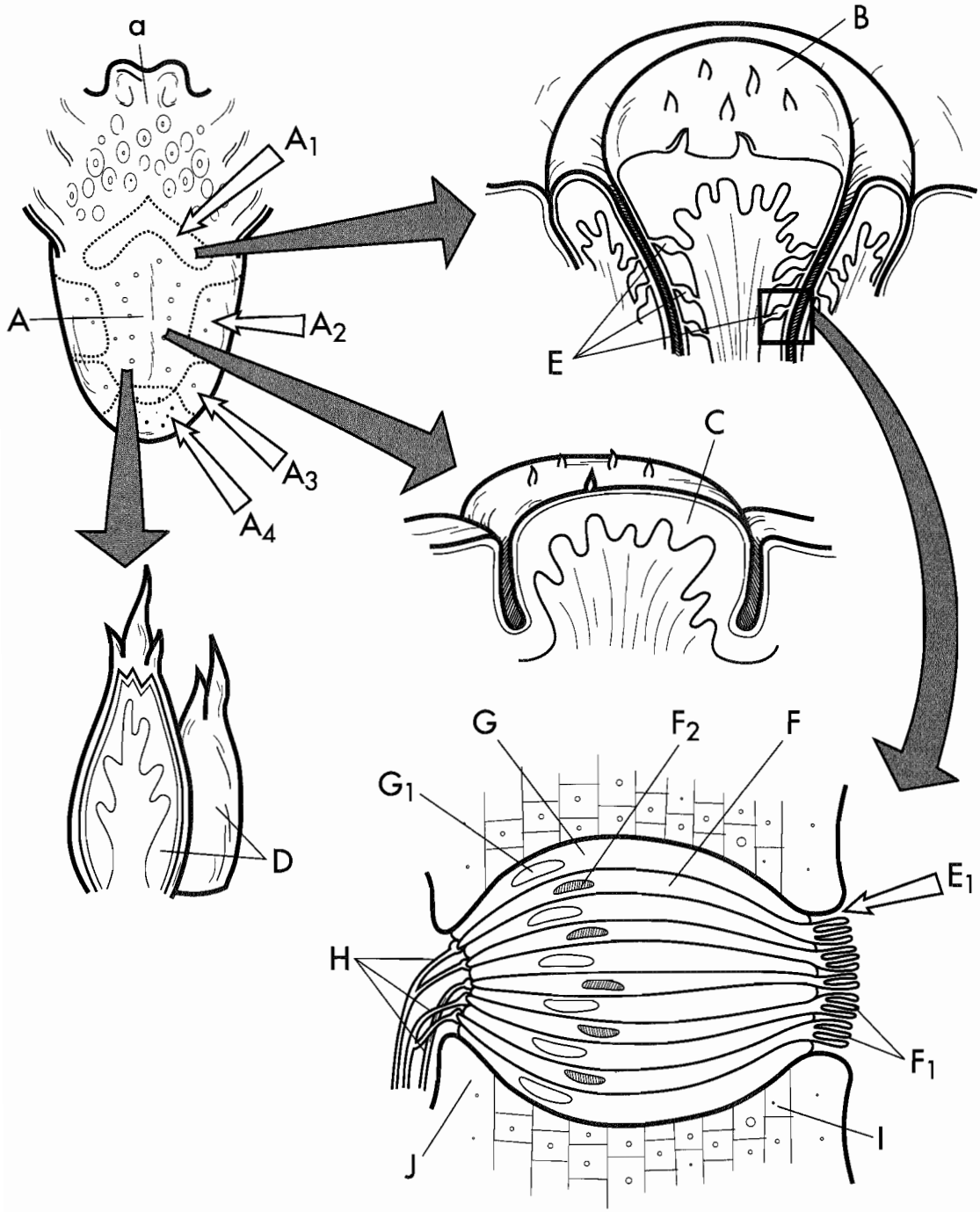






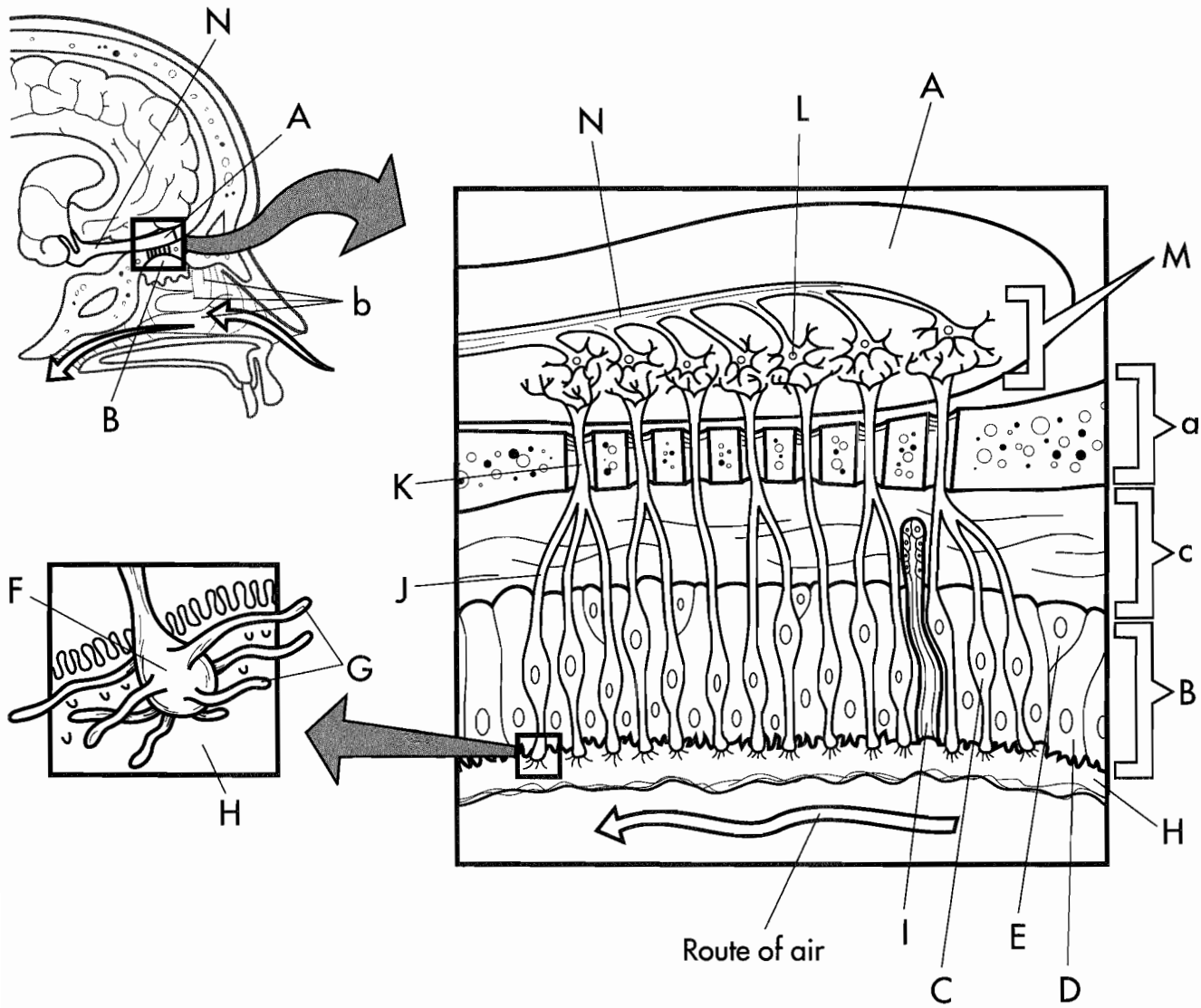






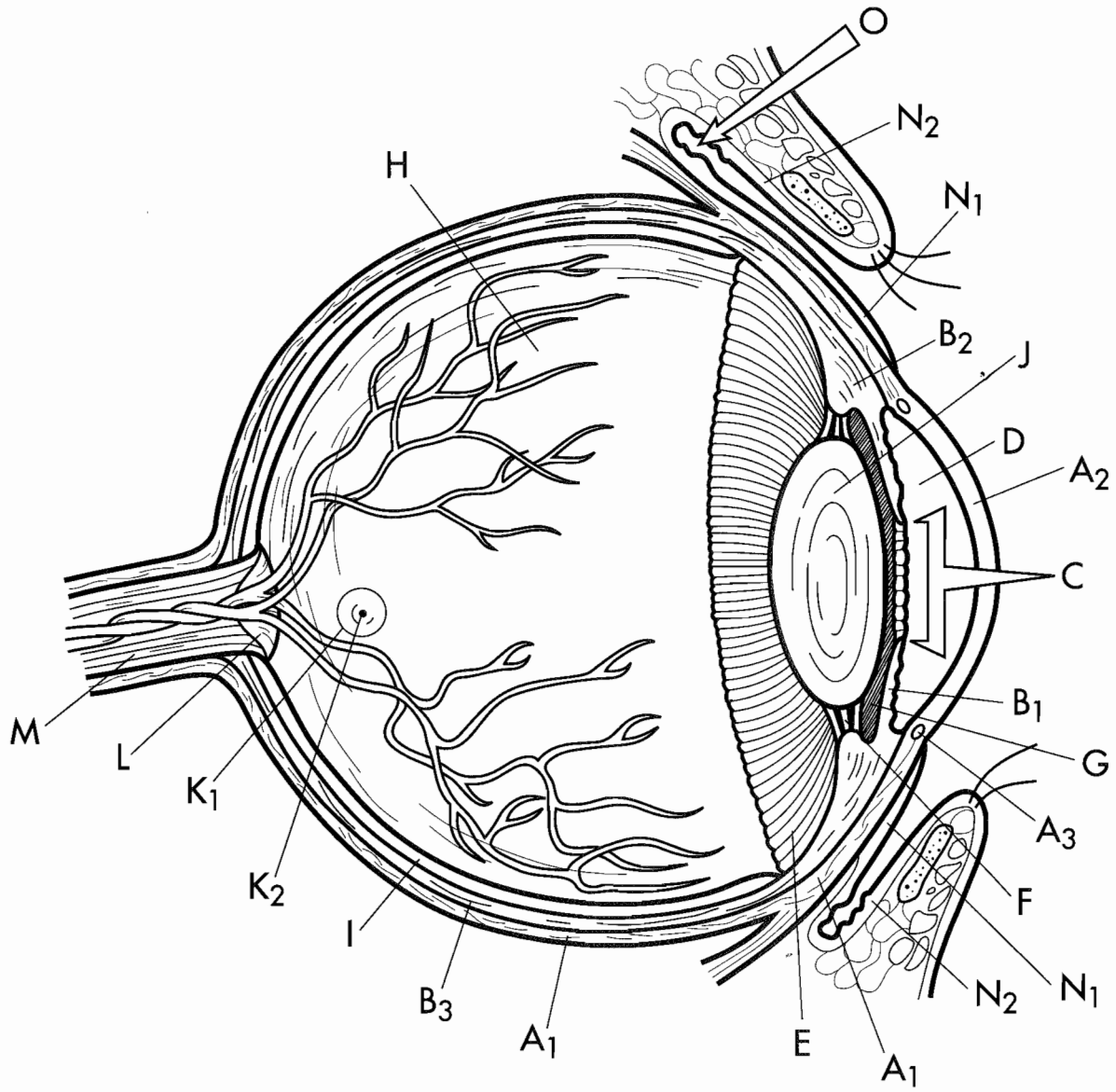
Tongue	A	○
Bitter taste	A_1	○
Sour taste	A_2	○
Salty taste	A_3	○
Sweet taste	A_4	○
Circumvallate papilla	B	○
Fungiform papilla	C	○
Filiform papilla	D	○
Taste bud	E	○

Pore	E_1	○
Gustatory cell	F	○
Microvilli	F_1	○
Nucleus	F_2	○
Supporting cell	G	○
Supporting cell nucleus	G_1	○
Cranial nerve	H	○
Epithelium	I	○
Connective tissue	J	○
Epiglottis	a	○



Olfactory bulb	A	○
Olfactory epithelium	B	○
Olfactory receptor cells	C	○
Sustentacular cells	D	○
Basal cells	E	○
Olfactory knob	F	○
Olfactory hairs	G	○
Mucus layer	H	○
Olfactory glands	I	○
Axons	J	○
Fiber bundles	K	○
Mitral cell	L	○
Glomerulus	M	○
Olfactory tract	N	○

Ethmoid bone	a	○
Nasal conchae	b	○
Connective tissue (basal lamina)	c	○

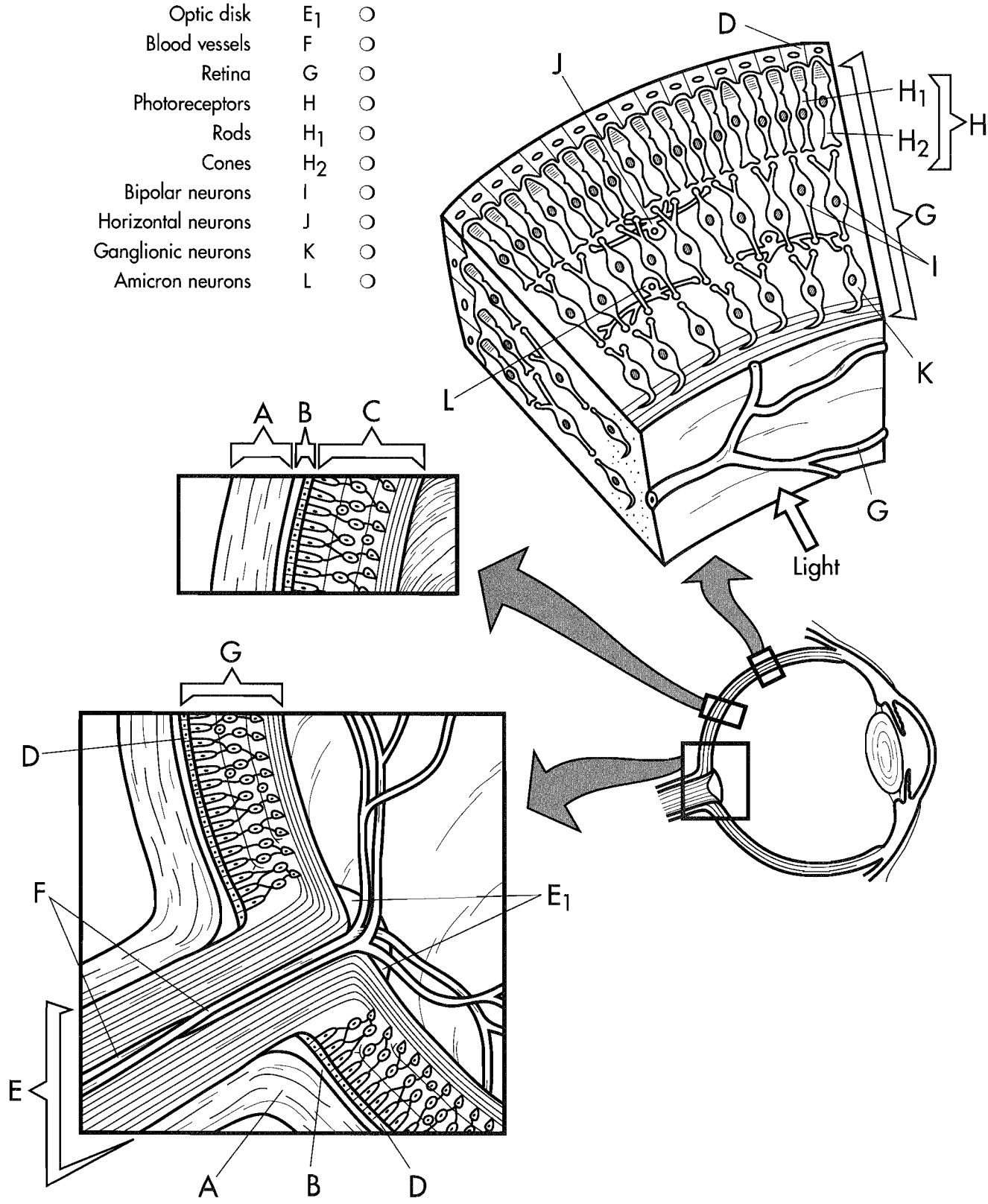


Sclera	A_1	○
Cornea	A_2	○
Limbus	A_3	○
Iris	B_1	○
Ciliary body	B_2	○
Choroid	B_3	○
Pupil	C	○
Anterior chamber	D	○
Ora serrata	E	○
Suspensory ligaments	F	○
Posterior chamber	G	○

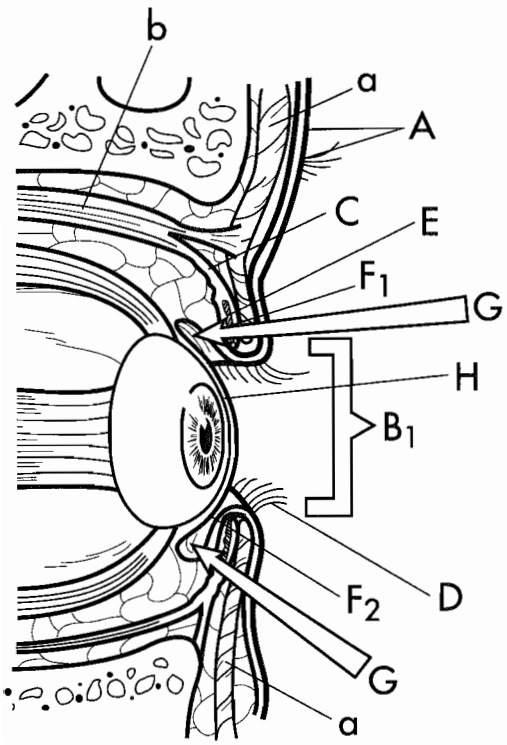
Vitreous chamber	H	○
Retina	I	○
Lens	J	○
Macula lutea	K_1	○
Fovea	K_2	○
Optic disk	L	○
Optic nerve	M	○
Ocular conjunctiva	N_1	○
Palpebral conjunctiva	N_2	○
Fornix	O	○

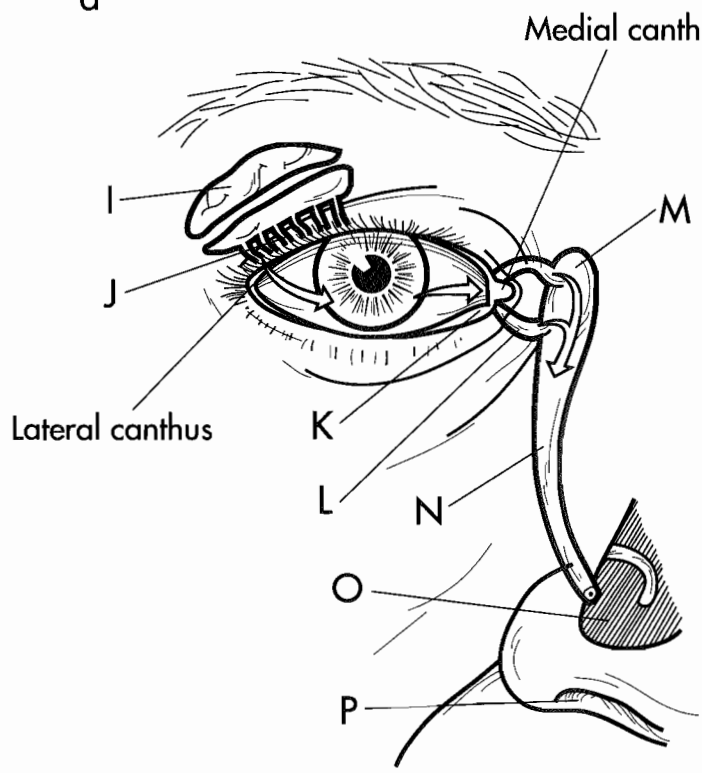
DETAILS OF THE EYE

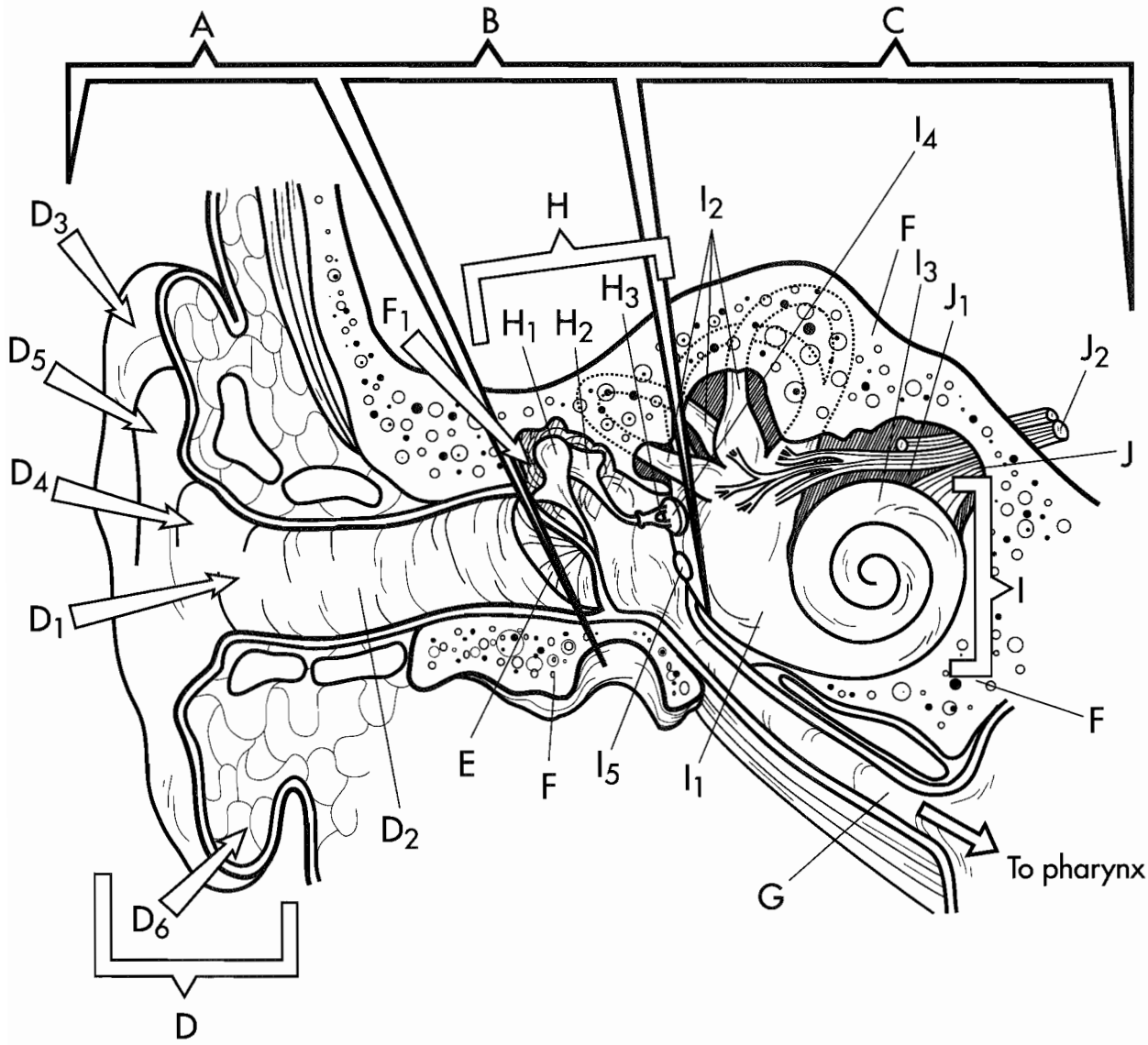
Fibrous tunic	A	○
Vascular tunic	B	○
Neural tunic	C	○
Pigmented layer	D	○
Optic nerve	E	○
Optic disk	E_1	○
Blood vessels	F	○
Retina	G	○
Photoreceptors	H	○
Rods	H_1	○
Cones	H_2	○
Bipolar neurons	I	○
Horizontal neurons	J	○
Ganglionic neurons	K	○
Amicron neurons	L	○



Eyebrows	A	○
Palpebral fissure	B_1	○
Tarsal plates	C	○
Eyelashes	D	○
Meibomian glands	E	○
Palpebral cornea	F_1	○
Ocular conjunctiva	F_2	○
Conjunctival sac (fornix)	G	○
Cornea	H	○
Lacrimal gland	I	○
Excretory ducts	J	○
Lacrimal punctum	K	○
Lacrimal canal	L	○
Lacrimal sac	M	○
Nasolacrimal duct	N	○
Inferior meatus	O	○
External nasal meatus	P	○
Orbicularis oculi	a	○
Levator palpebrae superioris	b	○



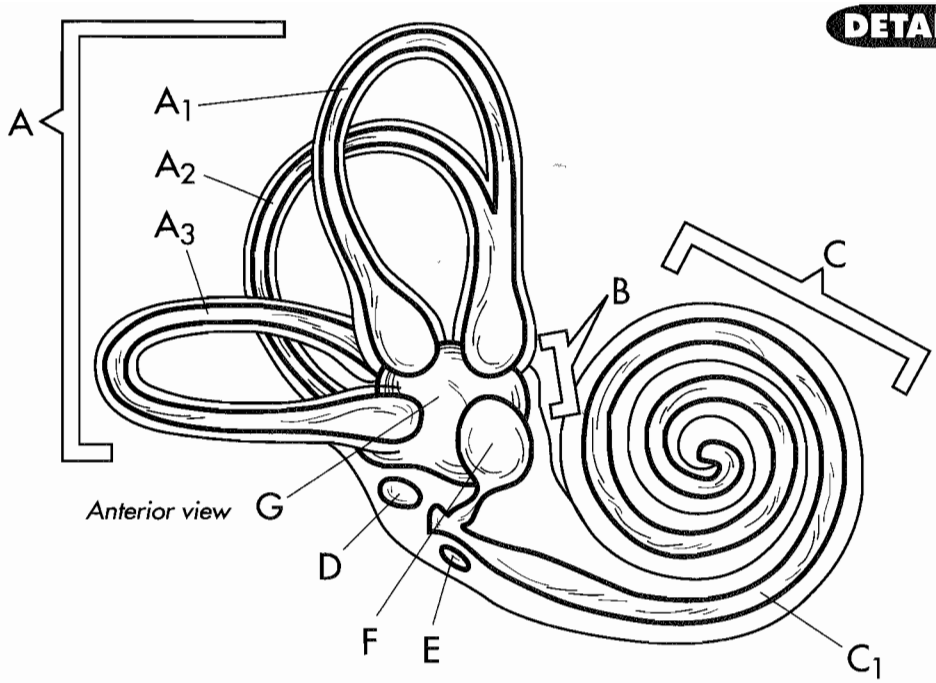


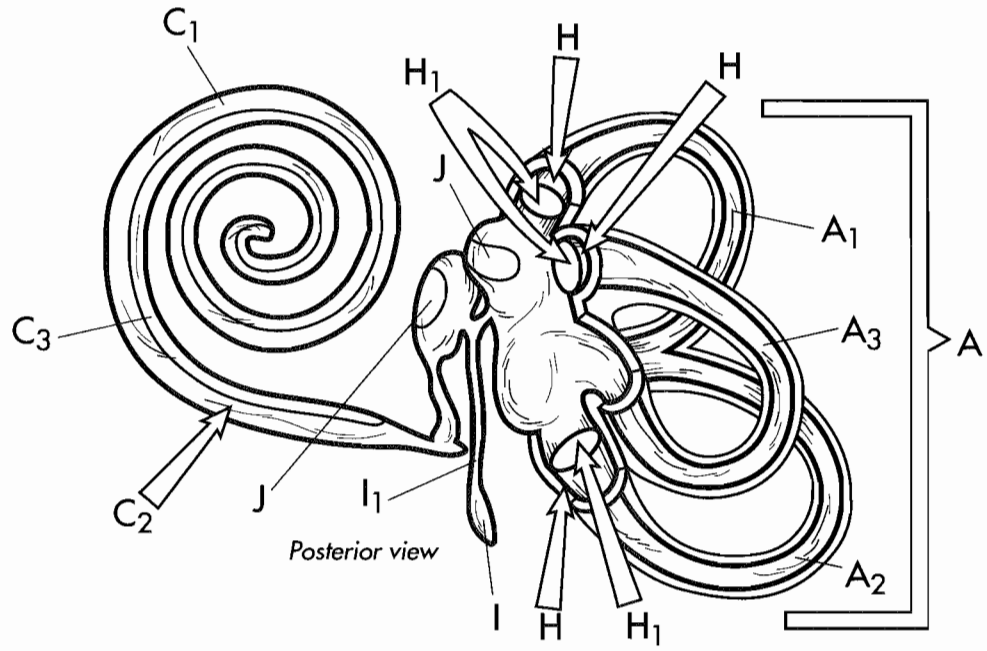


External ear	A	○
Middle ear	B	○
Internal ear	C	○
Pinna	D	○
Concha	D_1	○
External auditory canal	D_2	○
Helix	D_3	○
Antihelix	D_4	○
Scapha	D_5	○
Earlobe (lobule)	D_6	○
Tympanic membrane	E	○
Temporal bone	F	○
Tympanic cavity	F_1	○
Eustachian tube	G	○

Auditory ossicles	H	○
Malleus	H_1	○
Incus	H_2	○
Stapes	H_3	○
Bony labyrinth	I	○
Vestibule	I_1	○
Semicircular canals	I_2	○
Cochlea	I_3	○
Oval window	I_4	○
Round window	I_5	○
Vestibulocochlear nerve	J	○
Vestibular branch	J_1	○
Cochlear branch	J_2	○

DETAILS OF THE INNER EAR





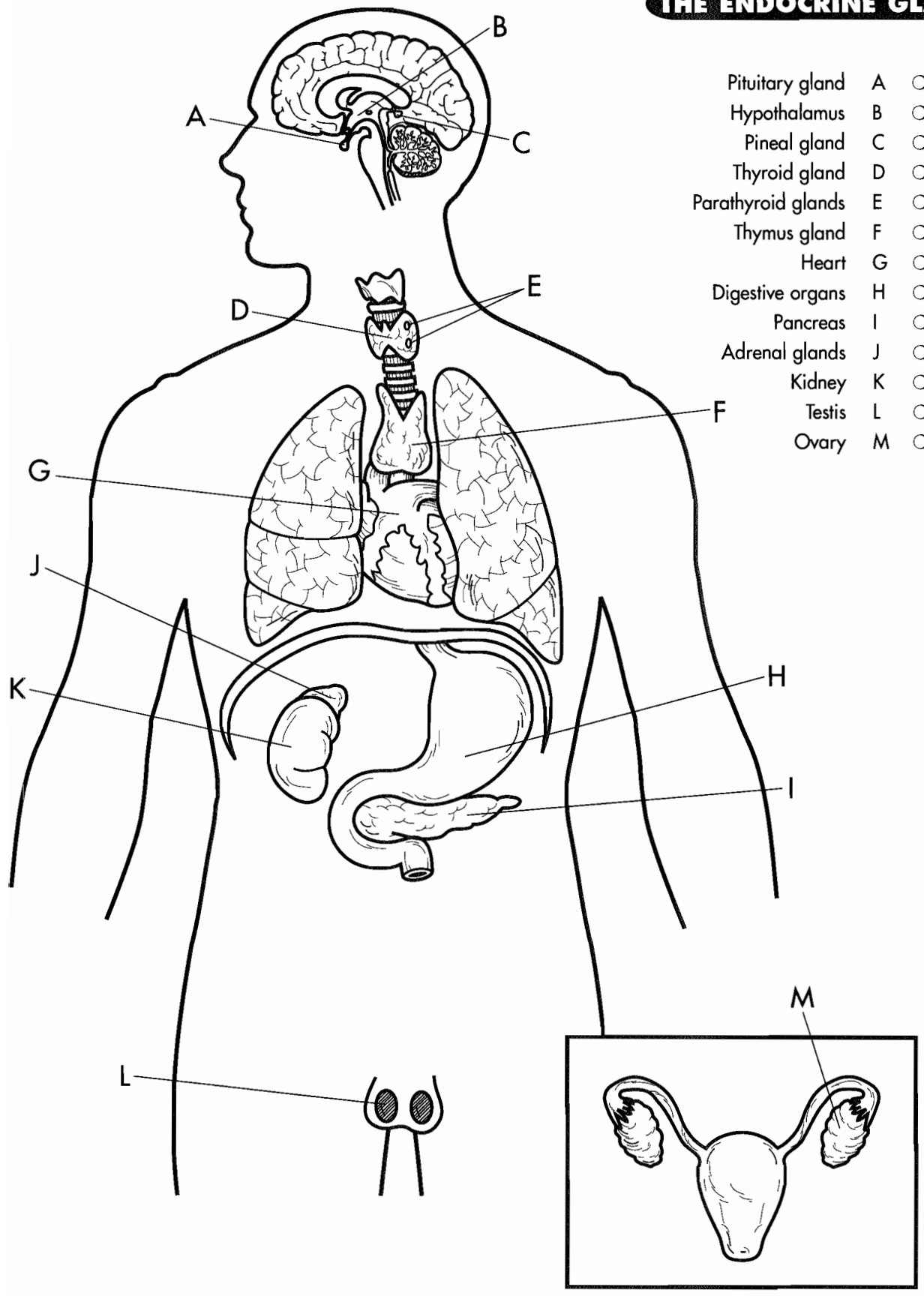
Semicircular canals	A	○
Anterior canal	A_1	○
Posterior canal	A_2	○
Lateral canal	A_3	○
Vestibule	B	○
Cochlea	C	○
Cochlear duct	C_1	○
Basilar membrane	C_2	○

Organ of corti	C_3	○
Oval window	D	○
Round window	E	○
Saccule	F	○
Utricle	G	○
Ampulla	H	○
Cristae	H_1	○
Endolymph sac	I	○
Endolymph duct	I_1	○
Macula	J	○

CHAPTER SIX:

the ENDOCRINE SYSTEM

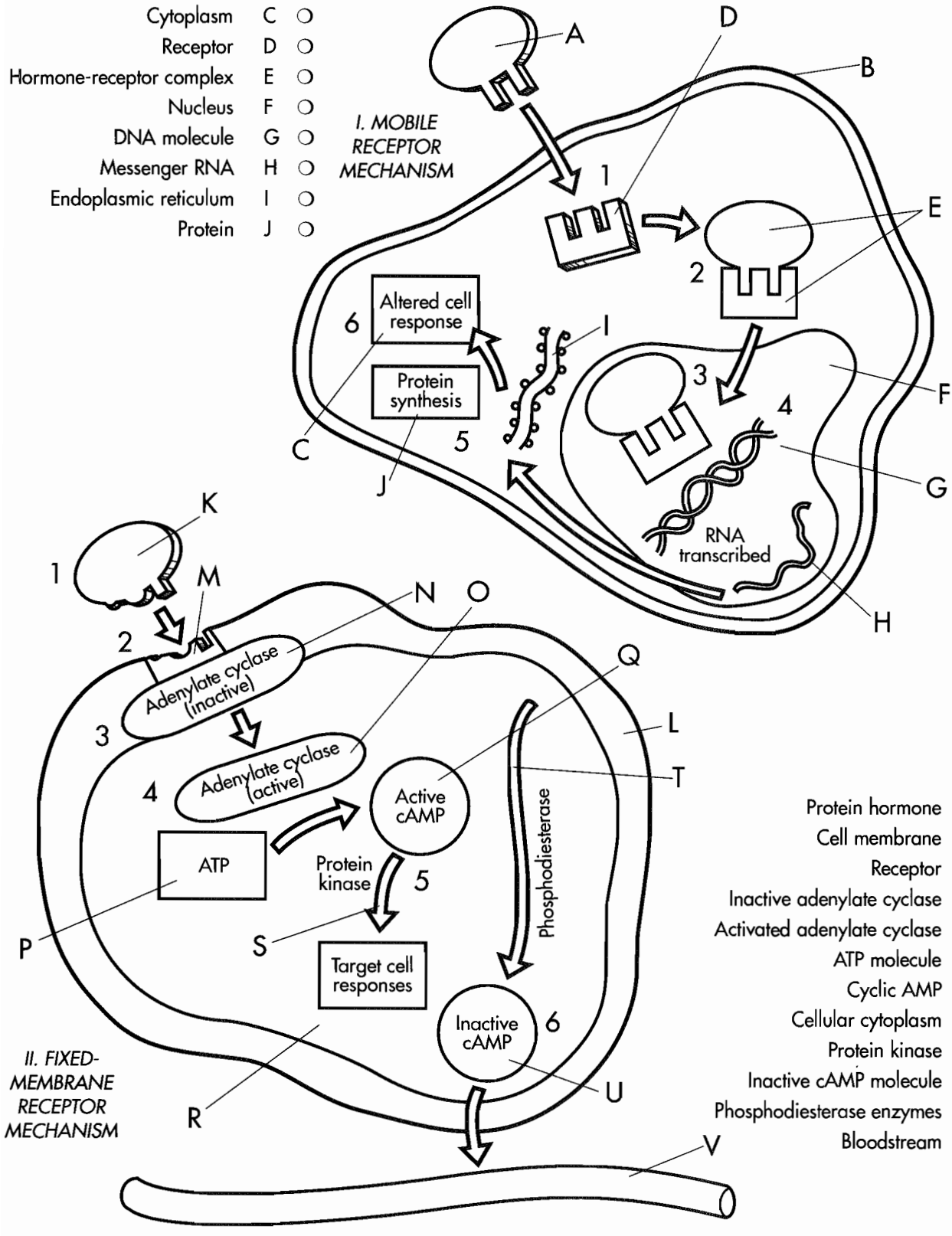
THE ENDOCRINE GLANDS



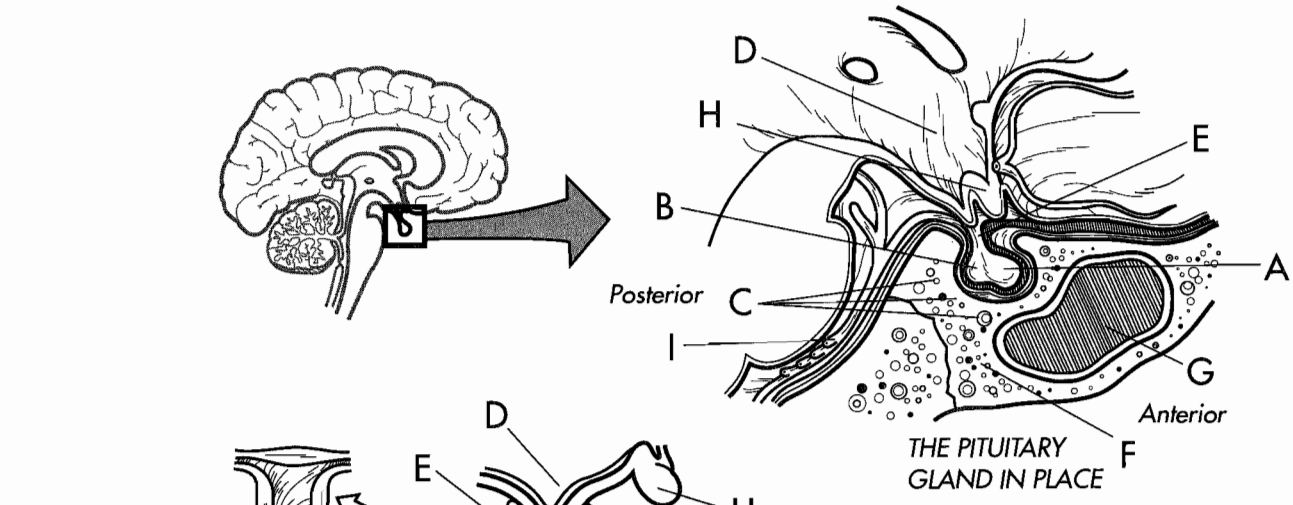
Pituitary gland	A	○
Hypothalamus	B	○
Pineal gland	C	○
Thyroid gland	D	○
Parathyroid glands	E	○
Thymus gland	F	○
Heart	G	○
Digestive organs	H	○
Pancreas	I	○
Adrenal glands	J	○
Kidney	K	○
Testis	L	○
Ovary	M	○

HORMONE ACTIVITY

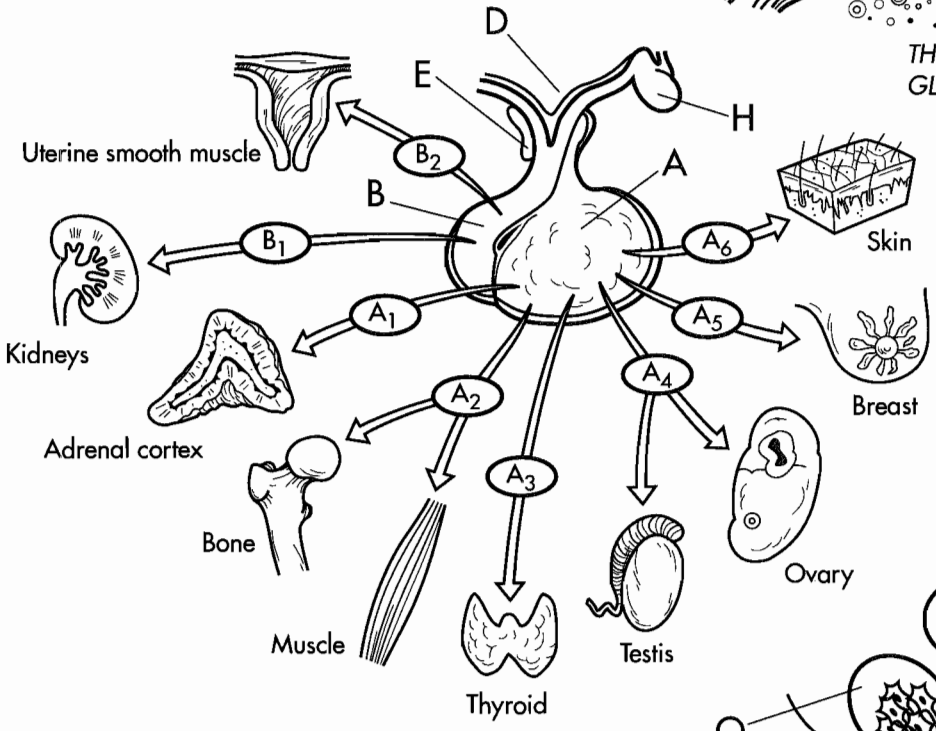
Steroid hormone A ○
Membrane B ○
Cytoplasm C ○
Receptor D ○
Hormone-receptor complex E ○
Nucleus F ○
DNA molecule G ○
Messenger RNA H ○
Endoplasmic reticulum I ○
Protein J ○



Protein hormone K ○
Cell membrane L ○
Receptor M ○
Inactive adenylate cyclase N ○
Activated adenylate cyclase O ○
ATP molecule P ○
Cyclic AMP Q ○
Cellular cytoplasm R ○
Protein kinase S ○
Inactive cAMP molecule T ○
Phosphodiesterase enzymes U ○
Bloodstream V ○

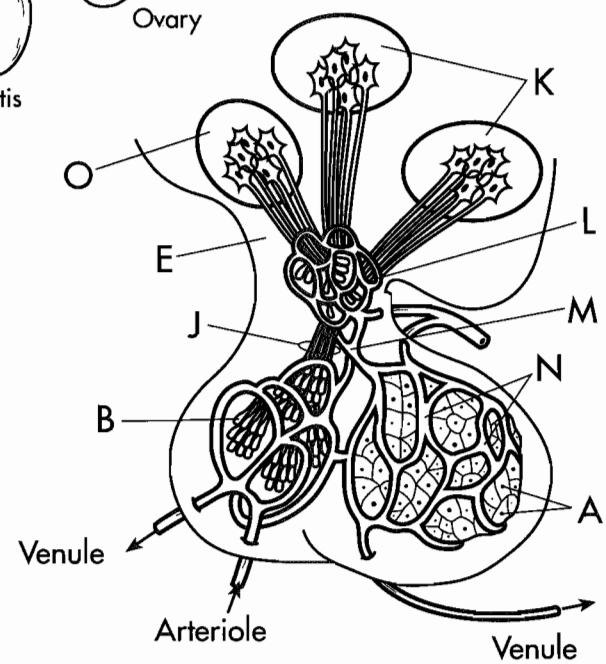


THE PITUITARY GLAND IN PLACE

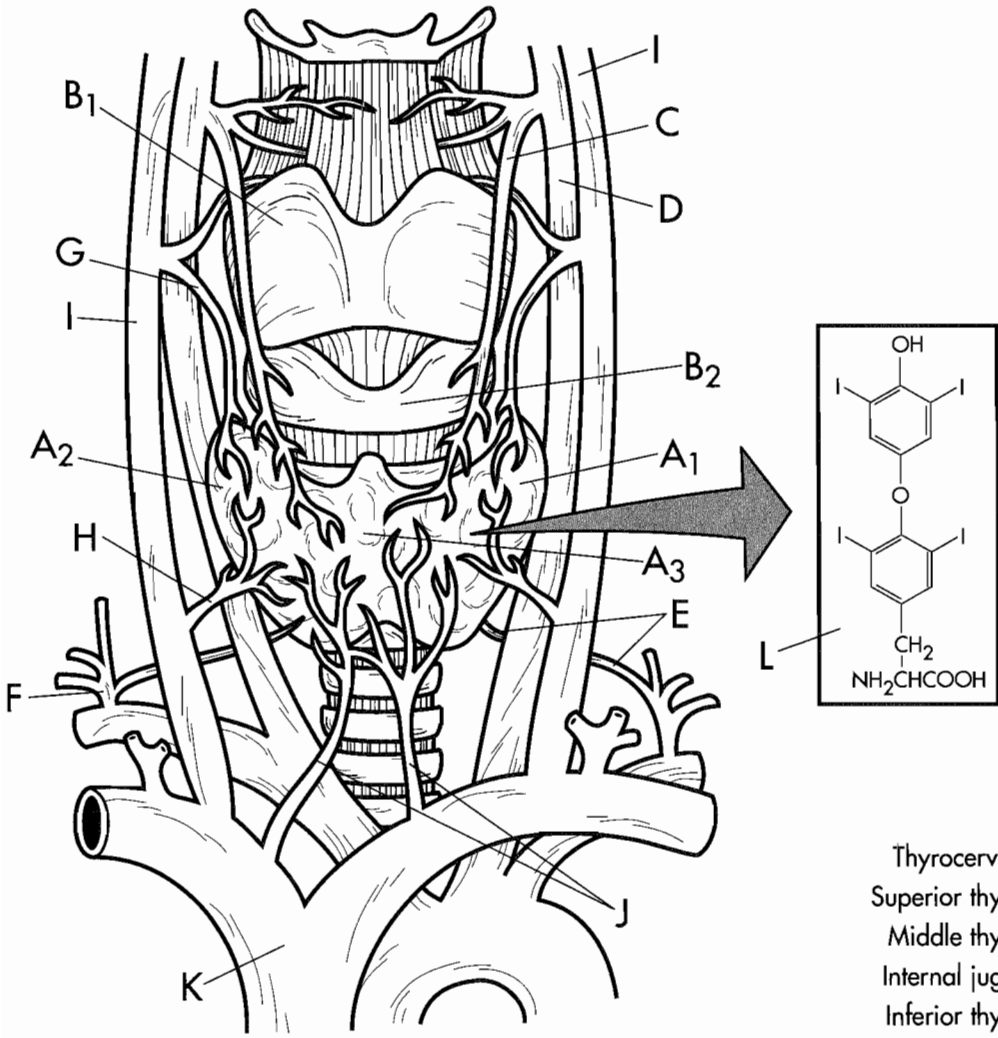


Optic chiasma	H	○
Basilar artery	I	○
Hypothalamic tract	J	○
Hypothalamic neurons	K	○
Primary capillary plexus	L	○
Hypophyseal portal veins	M	○
Secondary capillary plexus	N	○
Hypothalamus	O	○

Anterior lobe	A	○
Adrenocorticotropic hormone (ACTH)	A_1	○
Growth hormone (GH)	A_2	○
Thyroid stimulating hormone (TSH)	A_3	○
Gonadotropin hormones	A_4	○
Prolactin	A_5	○
Melanocyte stimulating hormone (MSH)	A_6	○
Posterior lobe	B	○
Antidiuretic hormone (ADH)	B_1	○
Oxytocin	B_2	○
Sella turcica	C	○
Hypothalamus	D	○
Infundibulum	E	○
Sphenoid bone	F	○
Sphenoidal sinus	G	○



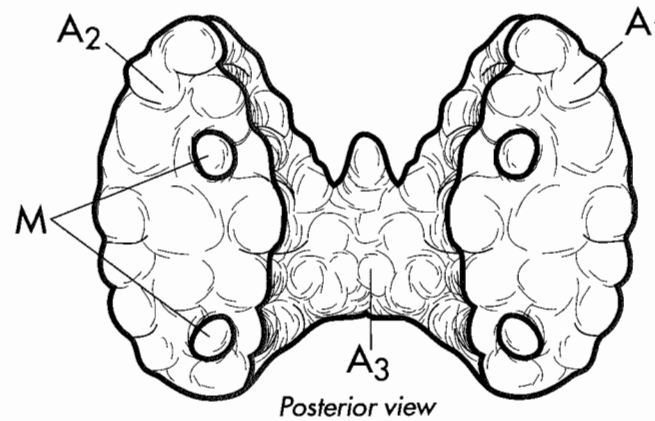
PITUITARY-HYPOTHALAMUS



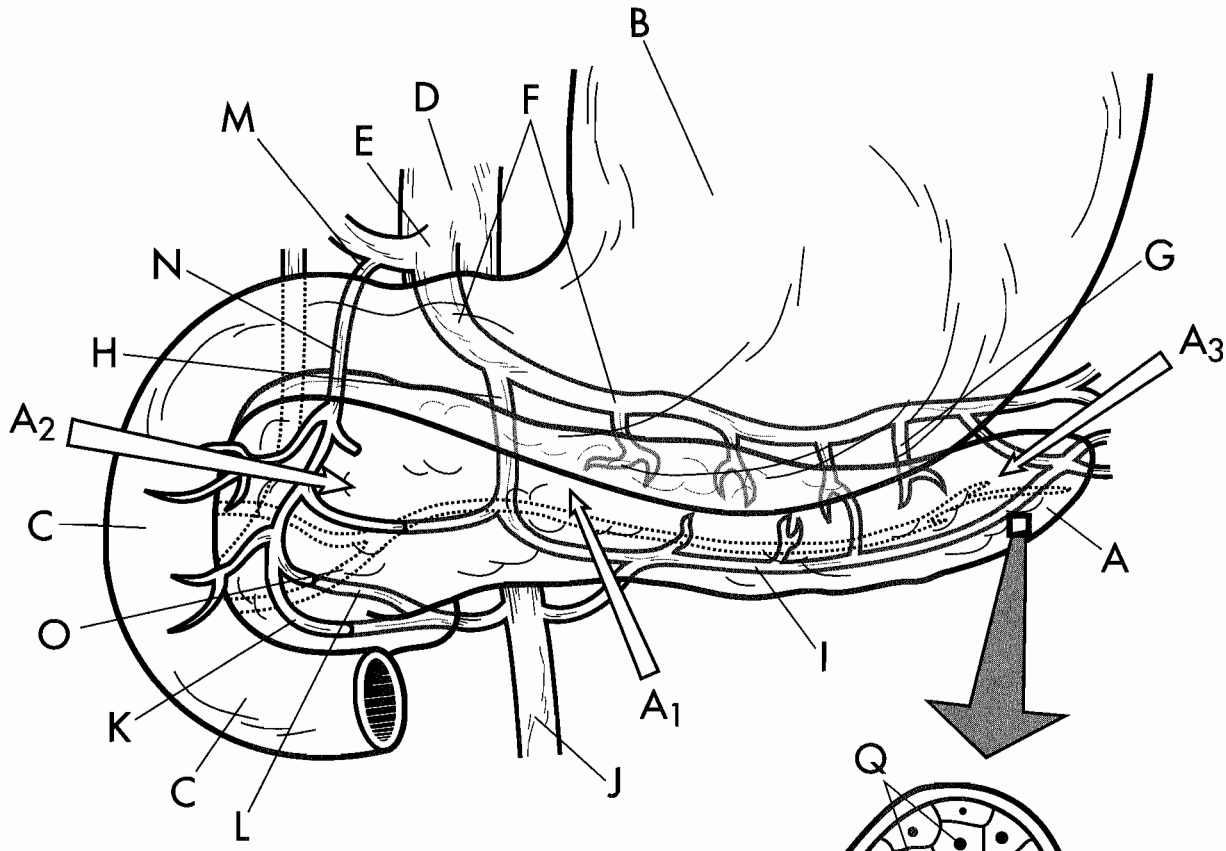
Anterior view

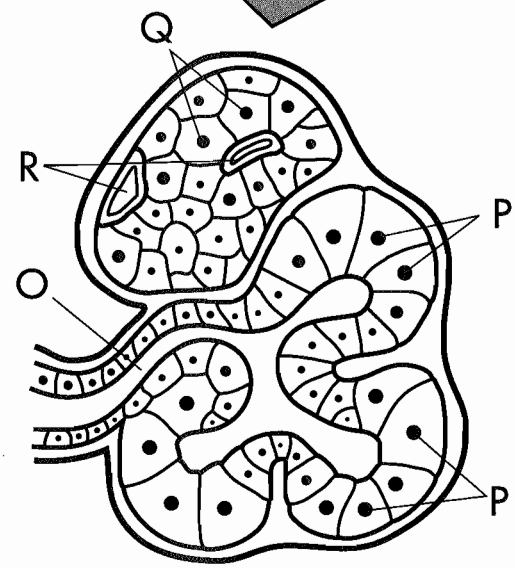
Thyrocervical trunk	F	○
Superior thyroid vein	G	○
Middle thyroid vein	H	○
Internal jugular vein	I	○
Inferior thyroid vein	J	○
Brachiocephalic vein	K	○
Thyroxin hormone	L	○
Parathyroid glands	M	○

Left lateral lobe	A_1	○
Right lateral lobe	A_2	○
Isthmus	A_3	○
Thyroid cartilage	B_1	○
Cricoid cartilage	B_2	○
Superior thyroid artery	C	○
External carotid artery	D	○
Inferior thyroid artery	E	○



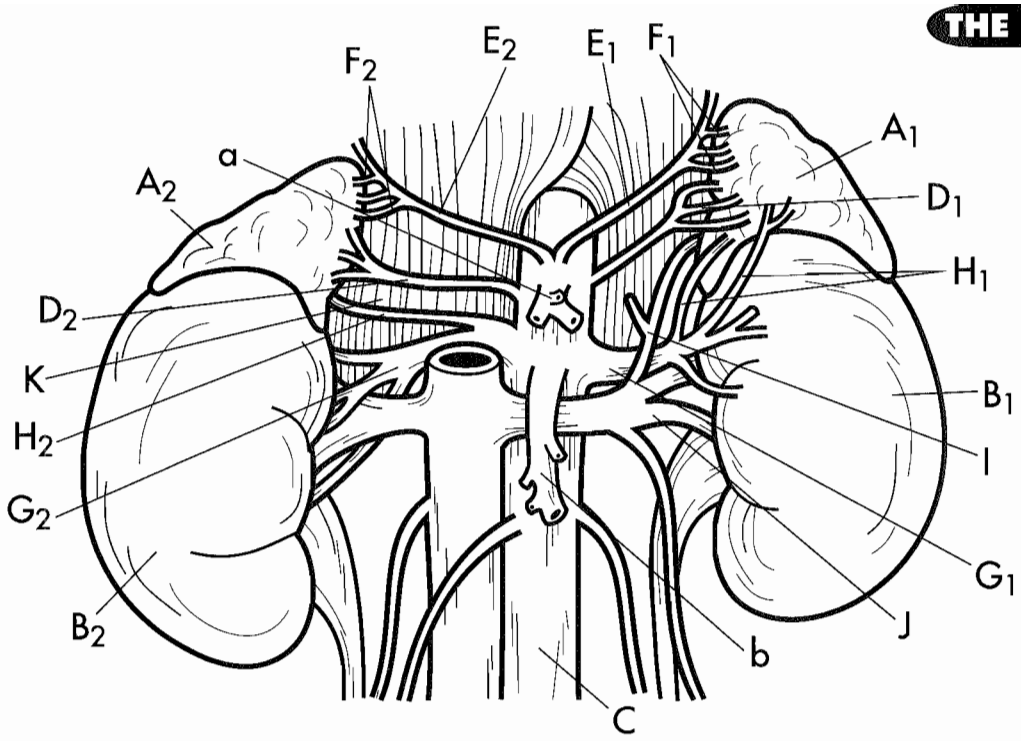
Posterior view

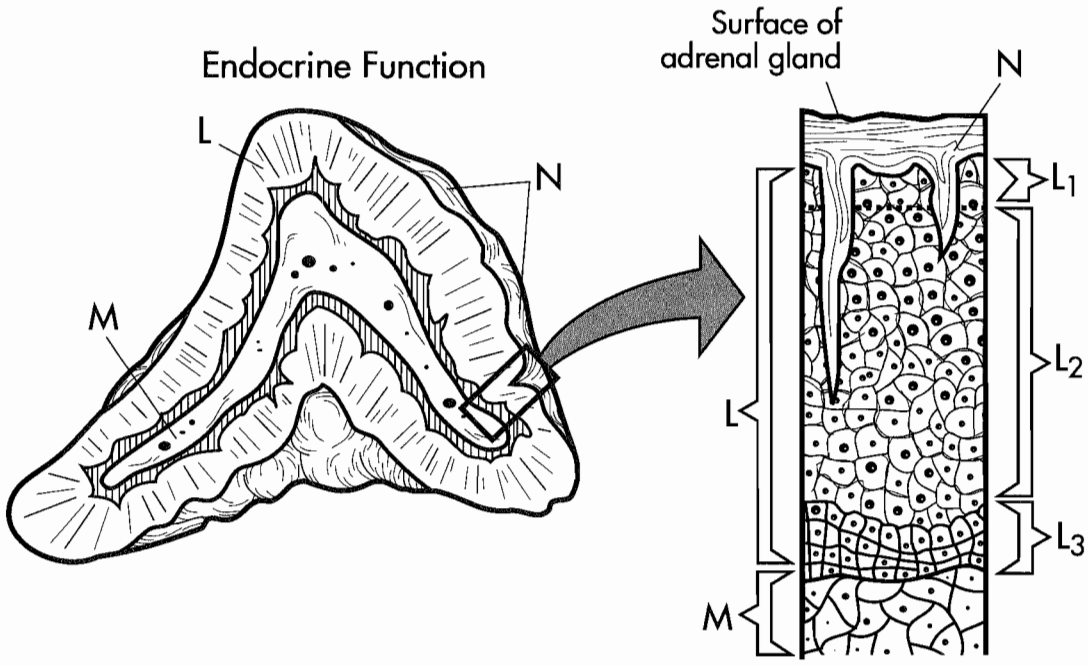




Pancreas	A	○
Body	A_1	○
Head	A_2	○
Tail	A_3	○
Stomach	B	○
Duodenum	C	○
Aorta	D	○
Celiac trunk	E	○
Splenic artery	F	○
Great pancreatic artery	G	○
Superior pancreatic artery	H	○
Inferior pancreatic artery	I	○
Superior mesenteric artery	J	○
Anterior pancreatoduodenal artery	K	○

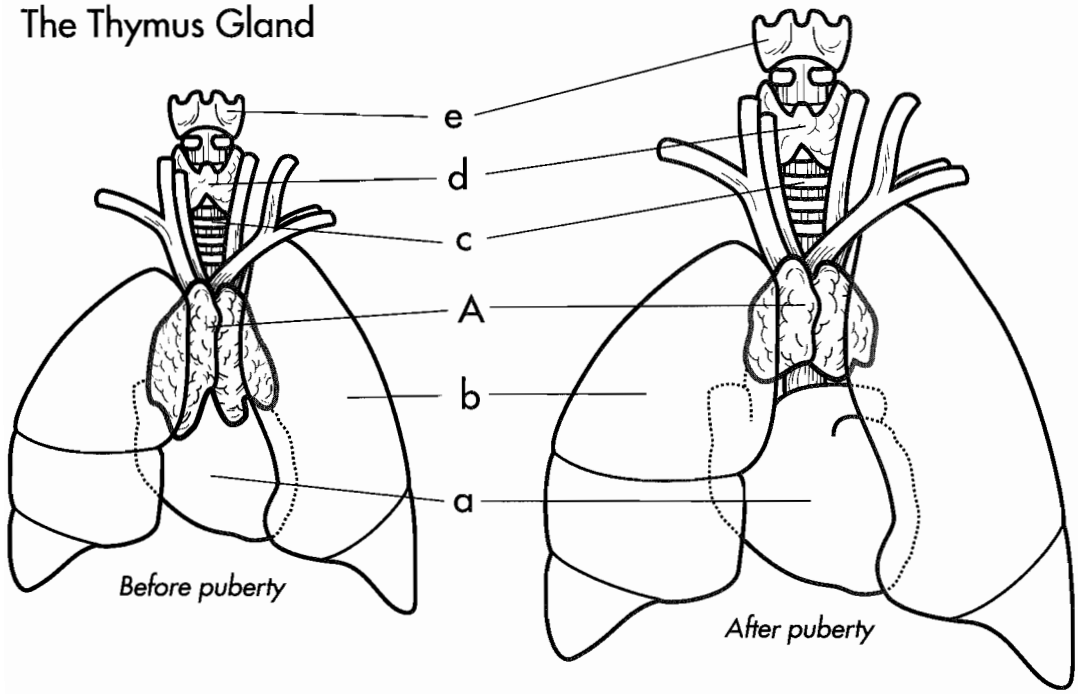
Posterior pancreatoduodenal artery	L	○
Gastroduodenal artery	M	○
Superior pancreatoduodenal artery	N	○
Pancreatic duct	O	○
Exocrine cells	P	○
Endocrine cells	Q	○
Cross sections of blood vessels	R	○





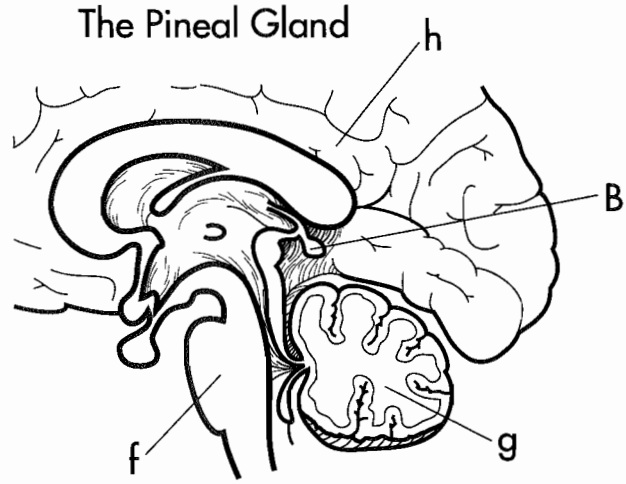
Left adrenal gland	A_1	○	Right inferior phrenic artery	E_2	○	Right suprarenal vein	K	○
Right adrenal gland	A_2	○	Left superior suprarenal artery	F_1	○	Cortex	L	○
Left kidney	B_1	○	Right superior suprarenal artery	F_2	○	Zona glomerulosa	L_1	○
Right kidney	B_2	○	Left renal artery	G_1	○	Zona fasciculata	L_2	○
Aorta	C	○	Right renal artery	G_2	○	Zona reticularis	L_3	○
Left middle suprarenal artery	D_1	○	Left inferior suprarenal artery	H_1	○	Medulla	M	○
Right middle suprarenal artery	D_2	○	Right inferior suprarenal artery	H_2	○	Capsule	N	○
Left inferior phrenic artery	E_1	○	Left suprarenal vein	I	○	Celiac trunk	a	○
			Left renal vein	J	○	Superior mesenteric artery	b	○

The Thymus Gland



Thymus gland	A	○
Pineal gland	B	○
Heart	a	○
Lungs	b	○
Trachea	c	○
Thyroid gland	d	○
Larynx	e	○
Pons	f	○
Cerebellum	g	○

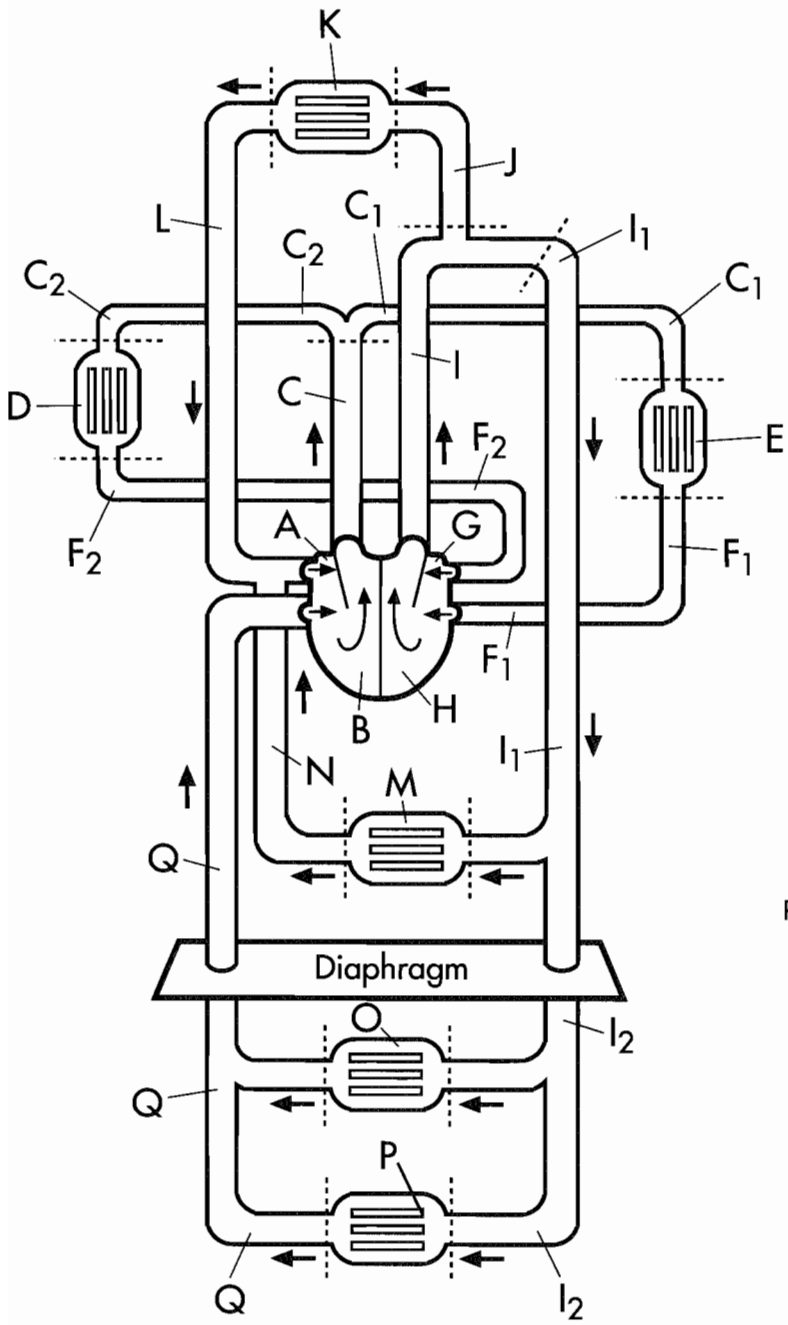
The Pineal Gland



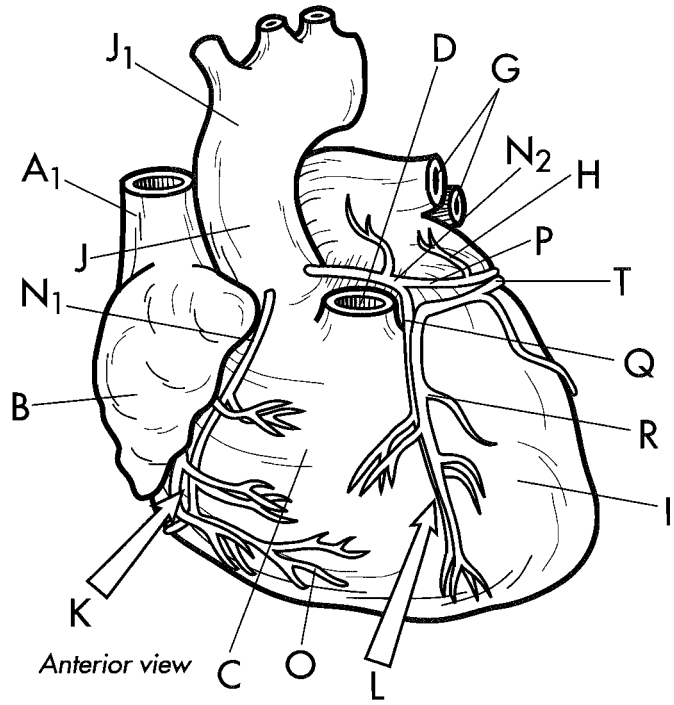
CHAPTER SEVEN:

the CIRCULATORY SYSTEM

SCHEMATIC OF THE CIRCULATORY SYSTEM



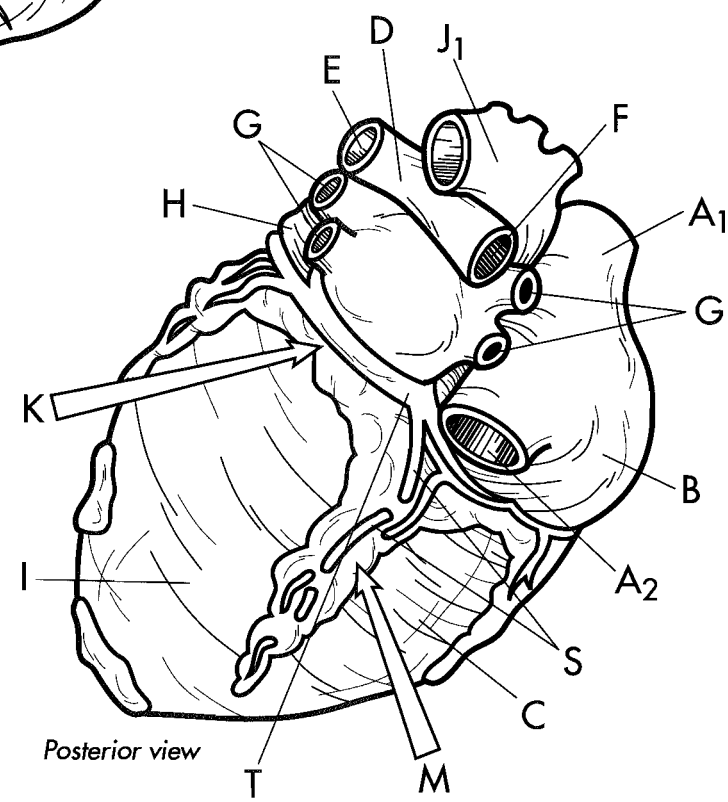
Right atrium	A	○
Right ventricle	B	○
Pulmonary trunk	C	○
Left pulmonary artery	C_1	○
Right pulmonary artery	C_2	○
Right lung	D	○
Left lung	E	○
Left pulmonary vein	F_1	○
Right pulmonary vein	F_2	○
Left atrium of the heart	G	○
Left ventricle	H	○
Aorta	I	○
Thoracic aorta	I_1	○
Abdominal aorta	I_2	○
Carotid arteries	J	○
Upper extremities	K	○
Superior vena cava	L	○
Thoracic organs	M	○
Azygous veins	N	○
Visceral organs	O	○
Lower extremities	P	○
Inferior vena cava	Q	○



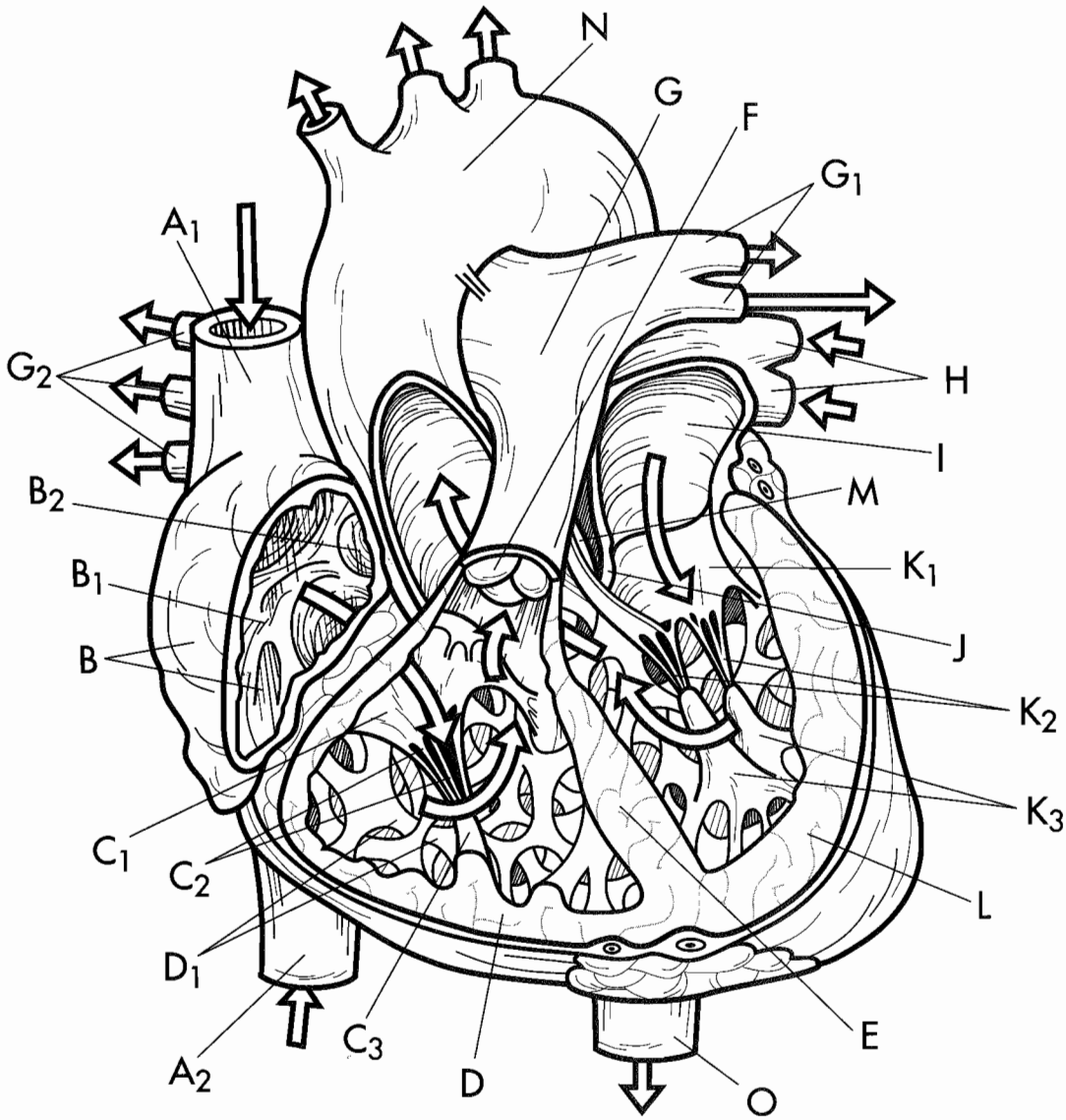
Anterior view

Aorta	J	○
Arch of the aorta	J_1	○
Coronary sulcus	K	○
Anterior ventricular sulcus	L	○
Posterior ventricular sulcus	M	○
Right coronary artery	N_1	○
Left coronary artery	N_2	○
Marginal branches	O	○
Circumflex branch	P	○
Anterior interventricular branch	Q	○
Cardiac vein	R	○
Middle cardiac vein	S	○
Coronary sinus	T	○

Superior vena cava	A_1	○
Inferior vena cava	A_2	○
Right auricle	B	○
Right ventricle	C	○
Pulmonary trunk	D	○
Pulmonary artery	E	○
Right pulmonary artery	F	○
Pulmonary veins	G	○
Left auricle	H	○
Left ventricle	I	○

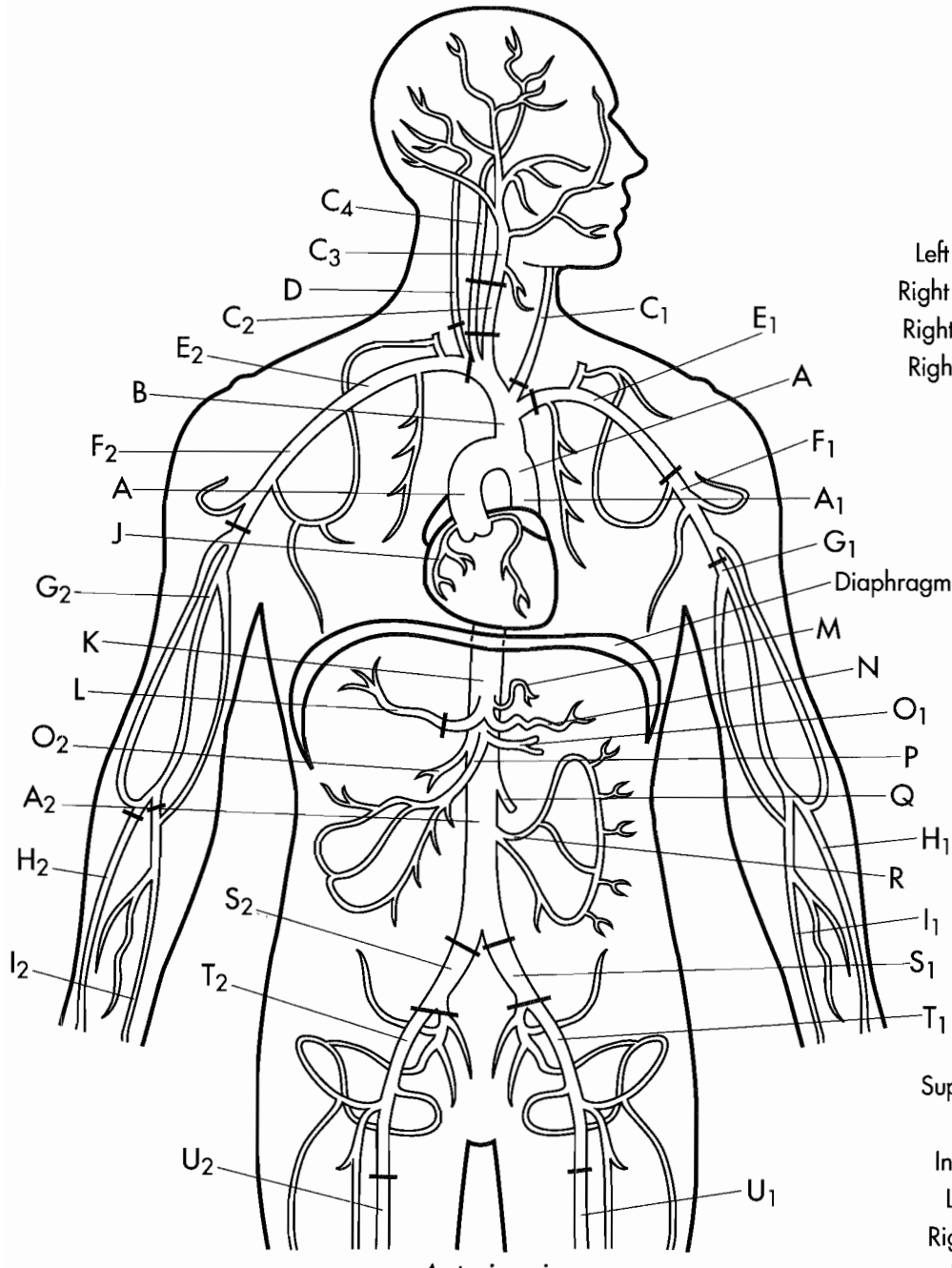


Posterior view



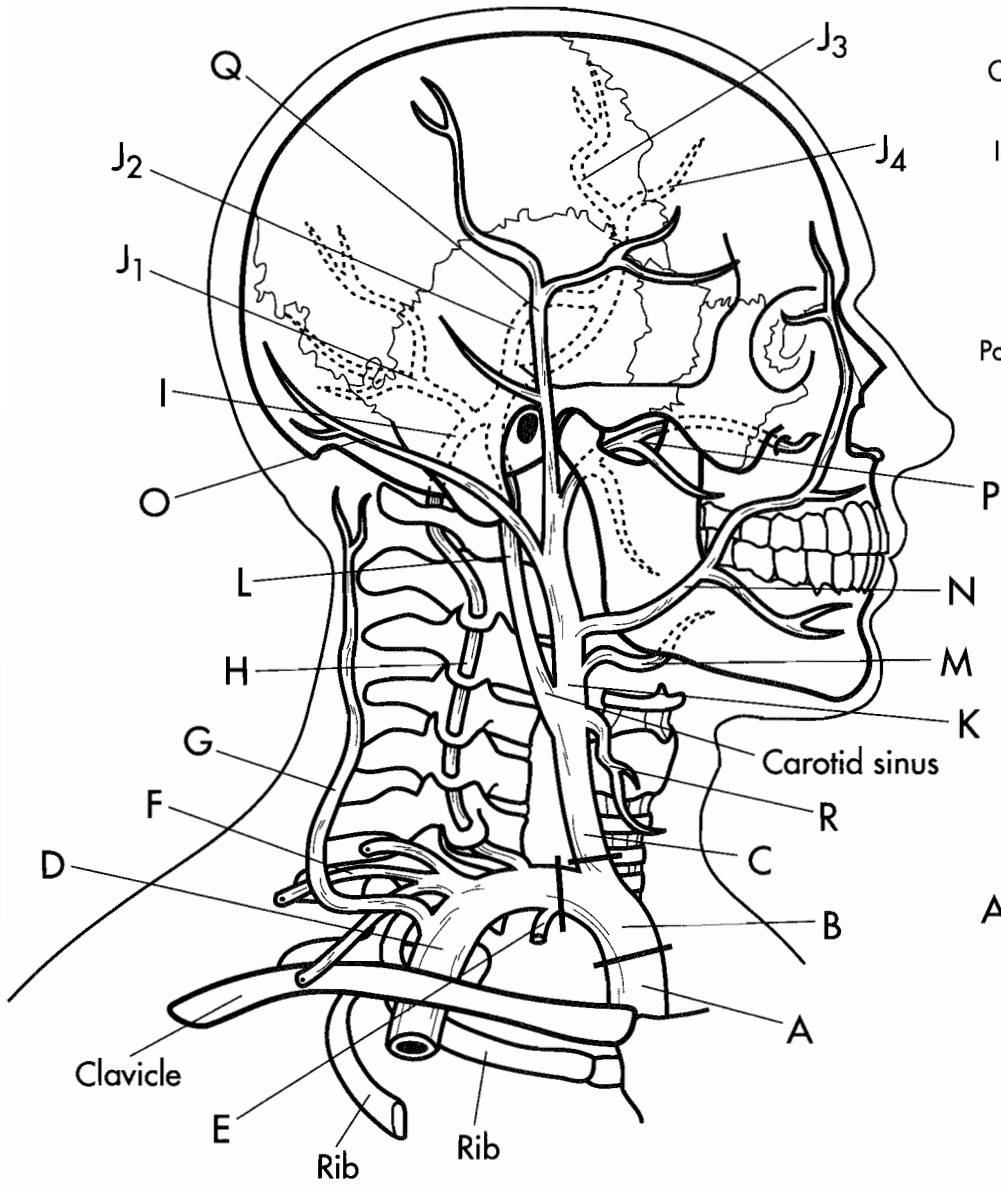
Superior vena cava	A_1	○	Left pulmonary arteries	G_1	○
Inferior vena cava	A_2	○	Right pulmonary arteries	G_2	○
Right atrium	B	○	Pulmonary veins	H	○
Pectinate muscles	B_1	○	Left atrium	I	○
Fossa ovalis	B_2	○	Intraatrial septum	J	○
Cusp	C_1	○	Cusp of the valve	K_1	○
Chordae tendinae	C_2	○	Chordae tendinae	K_2	○
Papillary muscles	C_3	○	Papillary muscles	K_3	○
Right ventricle	D	○	Left ventricle	L	○
Trabecular carneae	D_1	○	Aortic semilunar valve	M	○
Interventricular septum	E	○	Arch of the aorta	N	○
Pulmonary semilunar valve	F	○	Descending aorta	O	○
Pulmonary trunk	G	○			

PRINCIPAL ARTERIES OF THE BODY



Anterior view

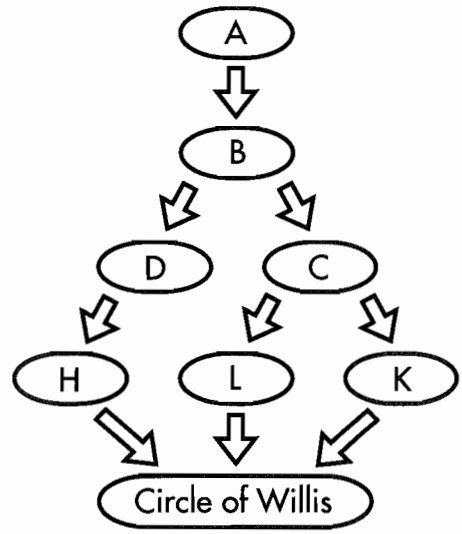
Aorta	A	○
Thoracic aorta	A_1	○
Abdominal aorta	A_2	○
Brachiocephalic trunk	B	○
Left common carotid artery	C_1	○
Right common carotid artery	C_2	○
Right external carotid artery	C_3	○
Right internal carotid artery	C_4	○
Vertebral artery	D	○
Left subclavian artery	E_1	○
Right subclavian artery	E_2	○
Left axillary artery	F_1	○
Right axillary artery	F_2	○
Left brachial artery	G_1	○
Right brachial artery	G_2	○
Left radial artery	H_1	○
Right radial artery	H_2	○
Left ulnar artery	I_1	○
Right ulnar artery	I_2	○
Coronary arteries	J	○
Celiac trunk	K	○
Hepatic artery	L	○
Gastric artery	M	○
Splenic artery	N	○
Left renal artery	O_1	○
Right renal artery	O_2	○
Superior mesenteric artery	P	○
Gonadal artery	Q	○
Inferior mesenteric artery	R	○
Left common iliac artery	S_1	○
Right common iliac artery	S_2	○
Left external iliac artery	T_1	○
Right external iliac artery	T_2	○
Left femoral artery	U_1	○
Right femoral artery	U_2	○



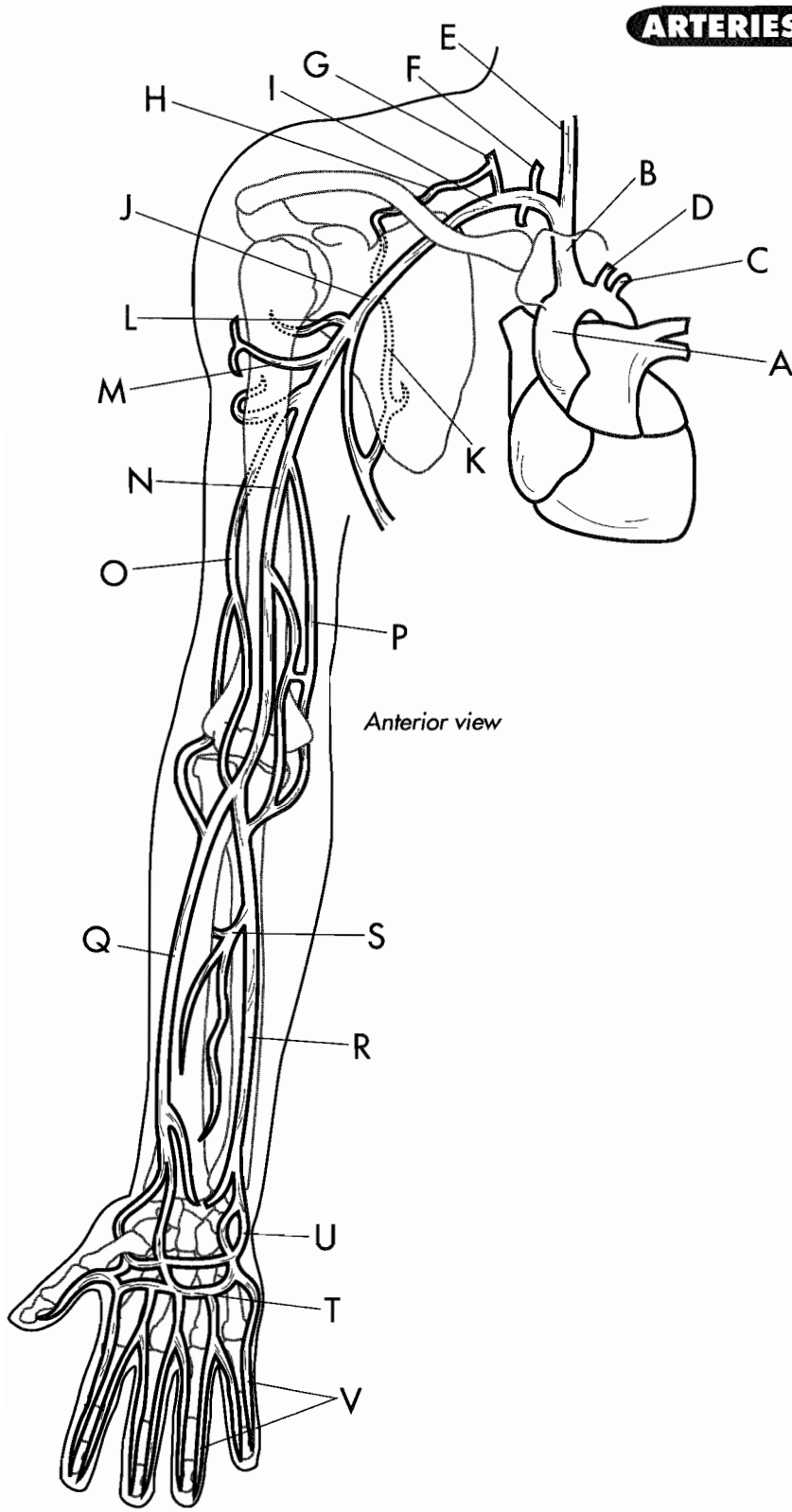
Aorta	A	○
Brachiocephalic trunk	B	○
Common carotid artery	C	○
Subclavian artery	D	○
Internal thoracic artery	E	○
Thyrocervical trunk	F	○
Costocervical trunk	G	○
Vertebral artery	H	○
Basilar artery	I	○
Posterior cerebral artery	J_1	○

Communicating artery	J_2	○
Middle cerebral artery	J_3	○
Anterior cerebral artery	J_4	○
External carotid artery	K	○
Internal carotid artery	L	○
Lingual artery	M	○
Facial artery	N	○
Occipital artery	O	○
Maxillary artery	P	○
Superficial temporal artery	Q	○
Superior thyroid artery	R	○

Arterial Flowchart

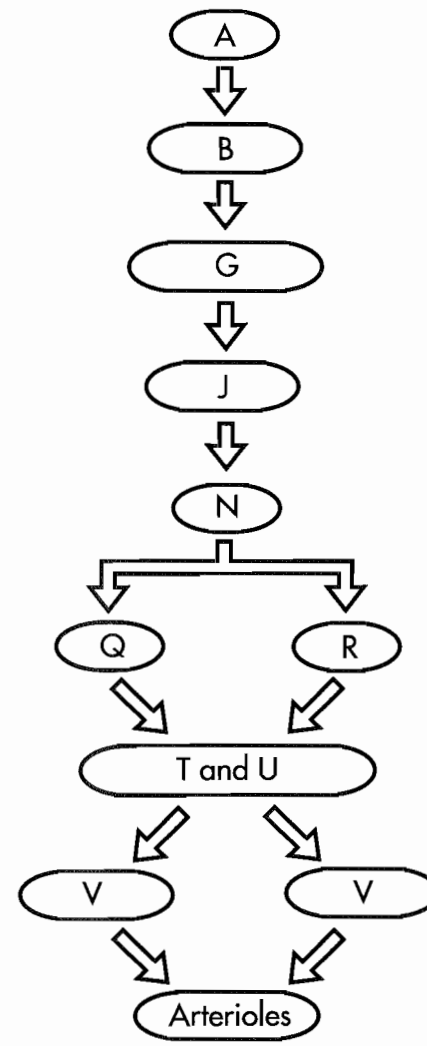


ARTERIES OF THE UPPER EXTREMITY



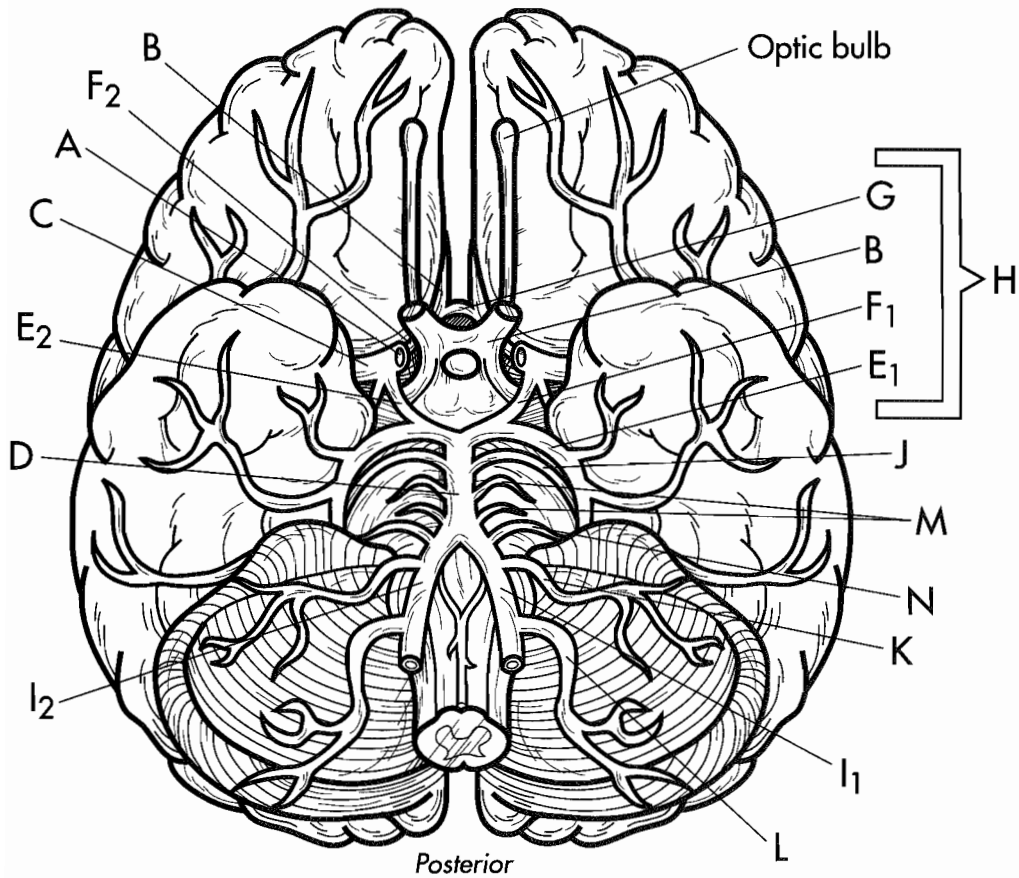
Aorta	A	○
Brachiocephalic trunk	B	○
Left subclavian artery	C	○
Left common carotid artery	D	○
Right common carotid artery	E	○
Right vertebral artery	F	○
Thyrocervical trunk	G	○
Suprascapular artery	H	○
Right subclavian artery	I	○
Axillary artery	J	○
Subscapular artery	K	○
Posterior humoral circumflex artery	L	○

Arterial Flowchart



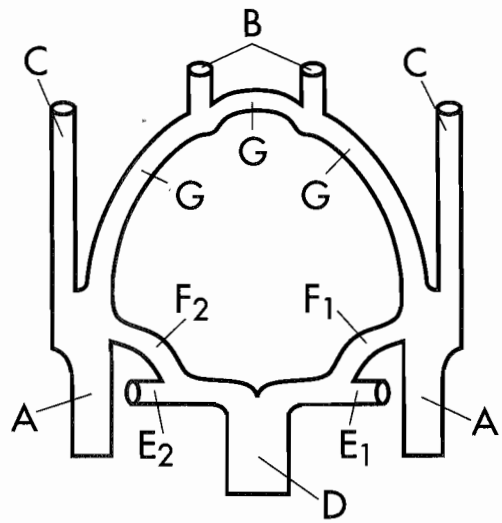
Anterior humoral circumflex artery	M	○
Brachial artery	N	○
Deep brachial artery	O	○
Nutrient artery of the humerus	P	○
Radial artery	Q	○
Ulnar artery	R	○
Interosseus artery	S	○

Superficial palmar arch	T	○
Deep palmar arch	U	○
Digital arteries	V	○



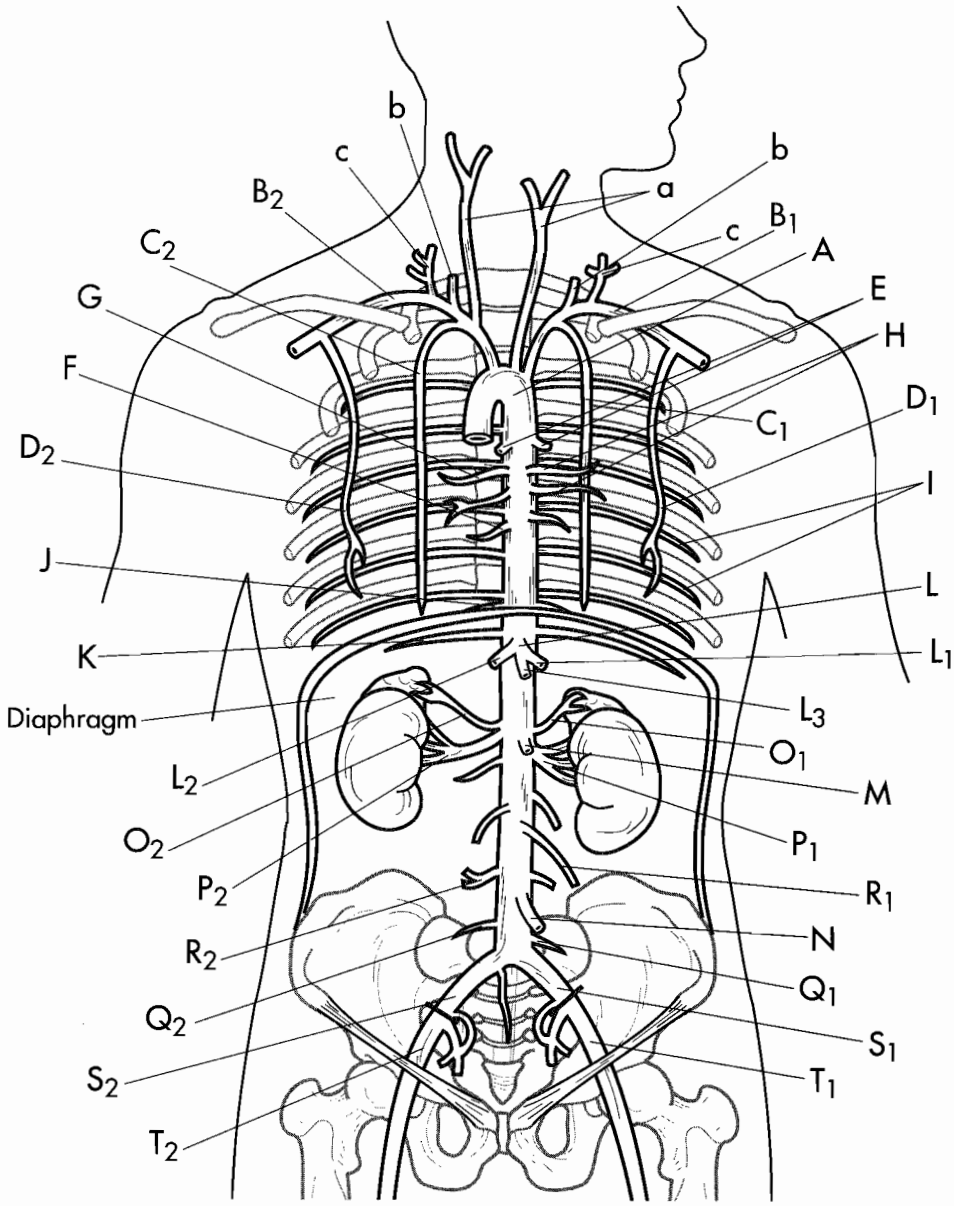
Posterior
Inferior view

Circle of Willis H



Internal carotid artery	A	○
Anterior cerebral artery	B	○
Middle cerebral artery	C	○
Basilar artery	D	○
Left posterior cerebral artery	E_1	○
Right posterior cerebral artery	E_2	○
Left posterior communicating artery	F_1	○
Right posterior communicating artery	F_2	○
Anterior communicating artery	G	○
Circle of Willis	H	○
Left vertebral artery	I_1	○
Right vertebral artery	I_2	○
Superior cerebellar artery	J	○
Anterior inferior cerebellar artery	K	○
Posterior inferior cerebellar artery	L	○
Pontine	M	○
Labyrinthine artery	N	○

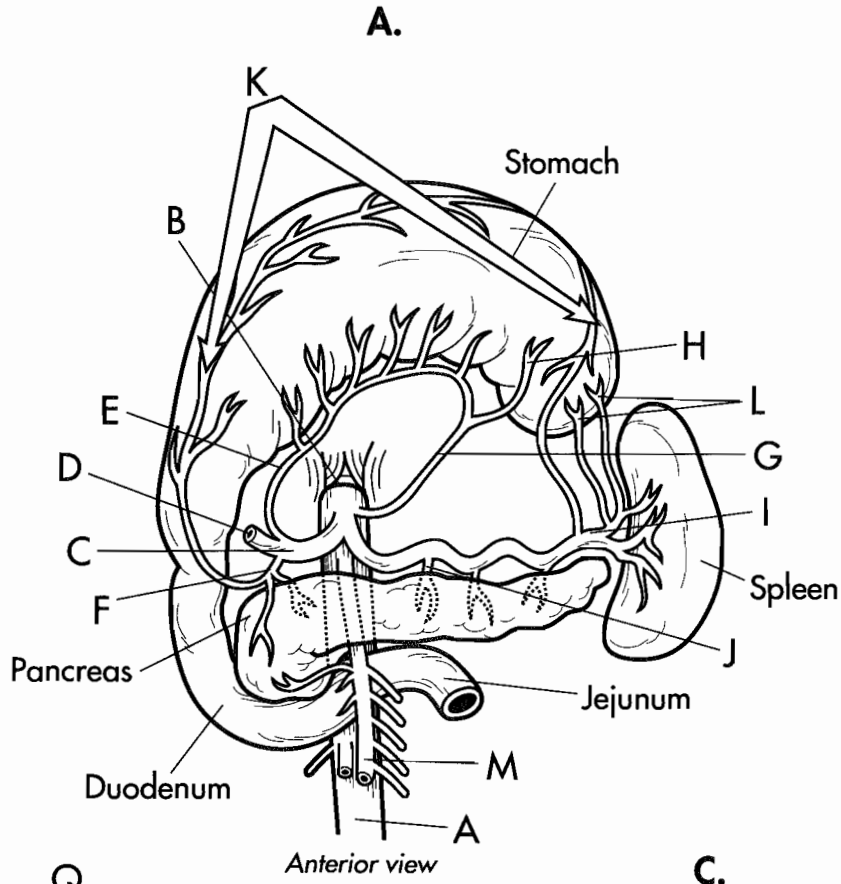
ARTERIES OF THE THORAX AND ABDOMEN

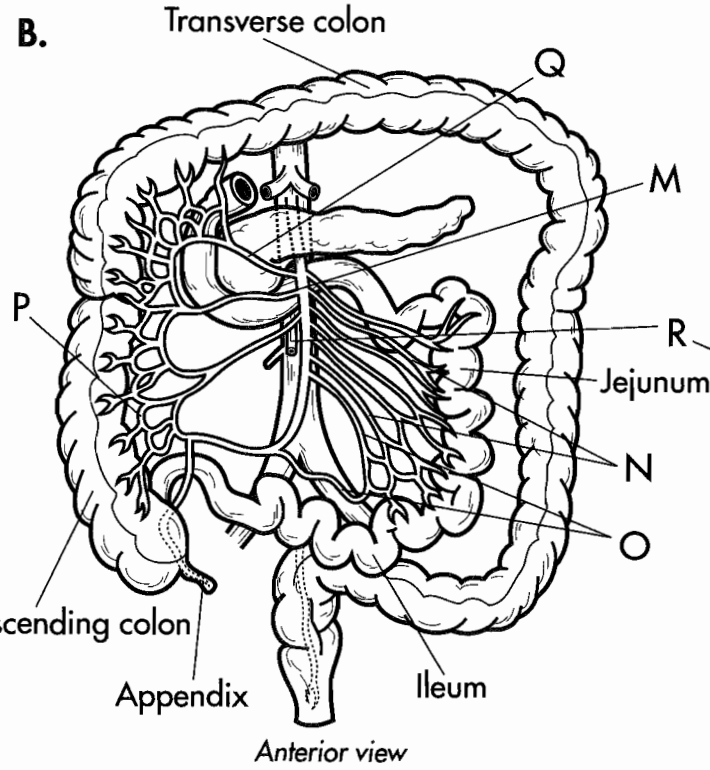


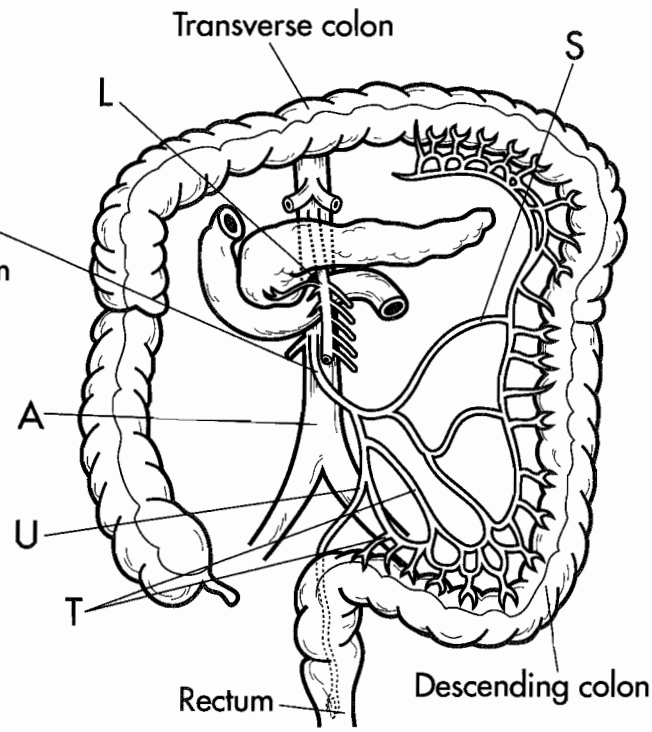
Aorta	A	○	Superior phrenic arteries	J	○	Left lumbar artery	Q_1	○
Left subclavian artery	B_1	○	Inferior phrenic arteries	K	○	Right lumbar artery	Q_2	○
Right subclavian artery	B_2	○	Celiac artery	L	○	Left gonadal artery	R_1	○
Left internal thoracic artery	C_1	○	Left gastric artery	L_1	○	Right gonadal artery	R_2	○
Right internal thoracic artery	C_2	○	Hepatic artery	L_2	○	Left common iliac artery	S_1	○
Left lateral thoracic artery	D_1	○	Splenic artery	L_3	○	Right common iliac artery	S_2	○
Right lateral thoracic artery	D_2	○	Superior mesenteric artery	M	○	Left external iliac artery	T_1	○
Bronchial arteries	E	○	Inferior mesenteric artery	N	○	Right external iliac artery	T_2	○
Pericardial arteries	F	○	Left suprarenal artery	O_1	○	Common carotid arteries	a	○
Esophageal arteries	G	○	Right suprarenal artery	O_2	○	Vertebral artery	b	○
Mediastinal arteries	H	○	Left renal artery	P_1	○	Thyrocervical trunk	c	○
Intercostal arteries	I	○	Right renal artery	P_2	○			

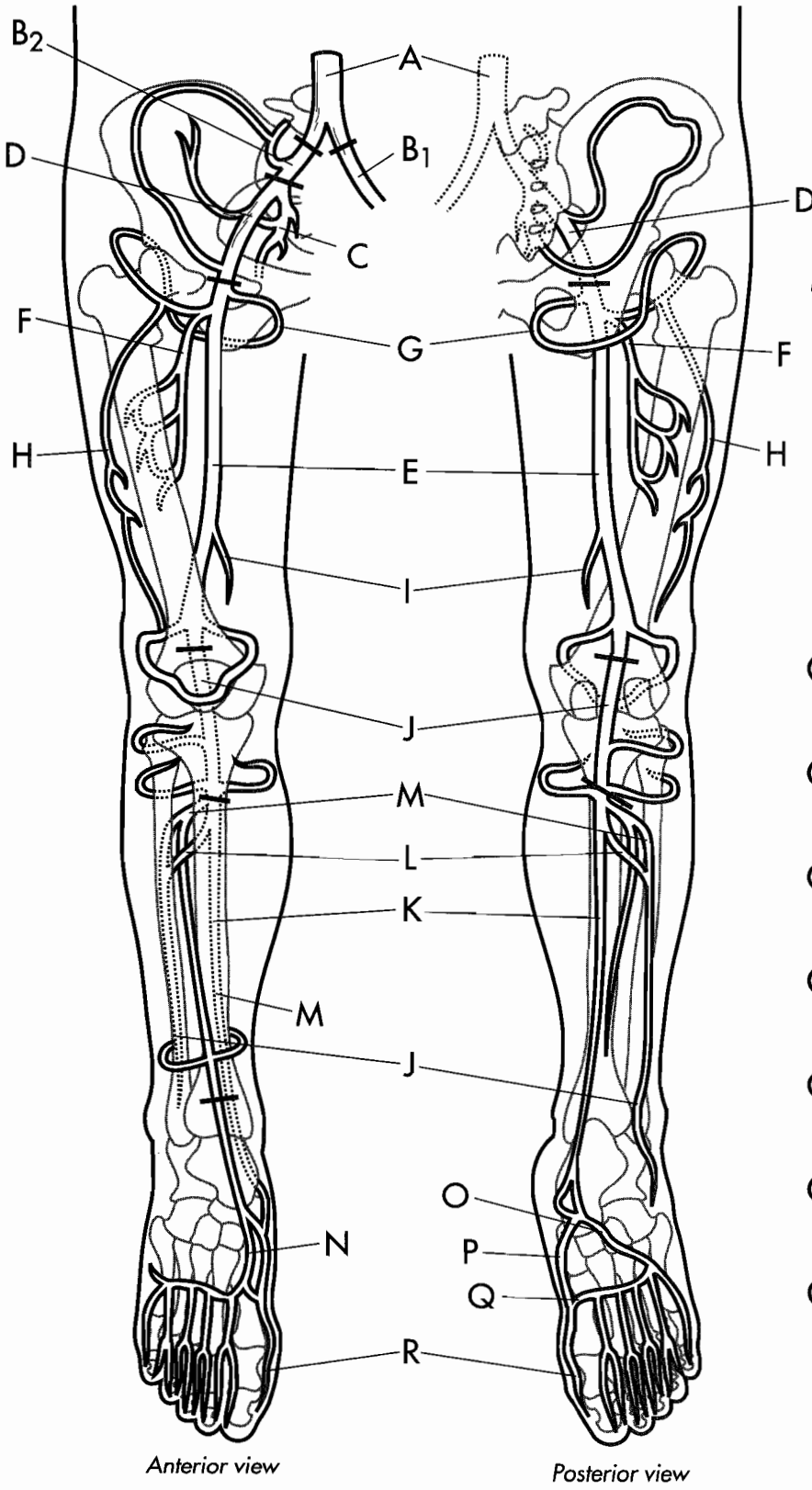
ARTERIES OF THE GASTROINTESTINAL TRACT

Abdominal aorta	A	○
Celiac trunk	B	○
Common hepatic artery	C	○
Hepatic artery	D	○
Right gastric artery	E	○
Gastroduodenal artery	F	○
Gastric artery	G	○
Esophageal artery	H	○
Splenic artery	I	○
Pancreatic arteries	J	○
Left gastroepiploic artery	K	○
Short gastric artery	L	○
Superior mesenteric artery	M	○
Jejunal arteries	N	○
Ileal arteries	O	○
Ileocolic artery	P	○
Middle colic artery	Q	○
Inferior mesenteric artery	R	○
Left colic artery	S	○
Sigmoid artery	T	○
Superior rectal artery	U	○

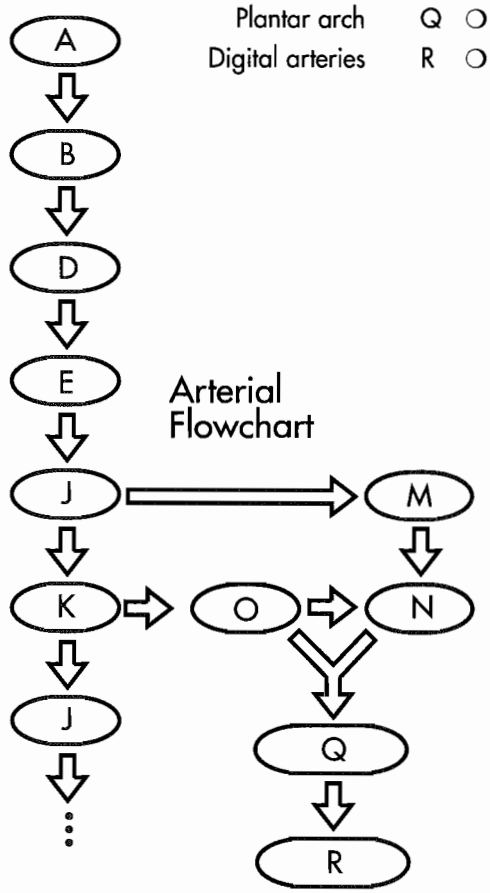




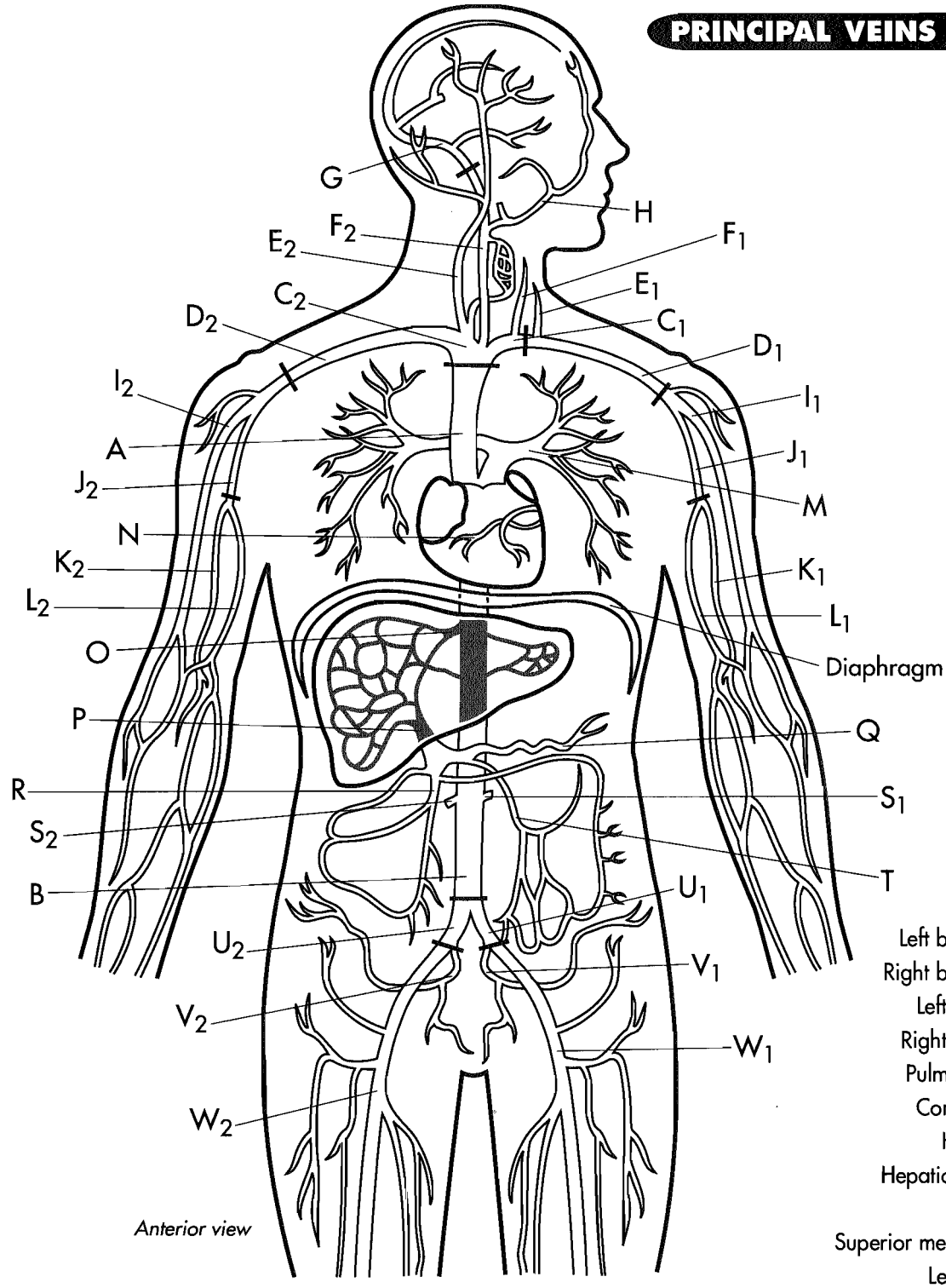




Aorta	A ○
Left common iliac artery	B_1 ○
Right common iliac artery	B_2 ○
Internal iliac artery	C ○
External iliac artery	D ○
Femoral artery	E ○
Deep femoral artery	F ○
Medial femoral circumflex artery	G ○
Lateral femoral circumflex artery	H ○
Descending genicular artery	I ○
Popliteal artery	J ○
Posterior tibial artery	K ○
Peroneal artery	L ○
Anterior tibial artery	M ○
Dorsalis pedis artery	N ○
Lateral plantar artery	O ○
Medial plantar artery	P ○
Plantar arch	Q ○
Digital arteries	R ○



PRINCIPAL VEINS OF THE BODY



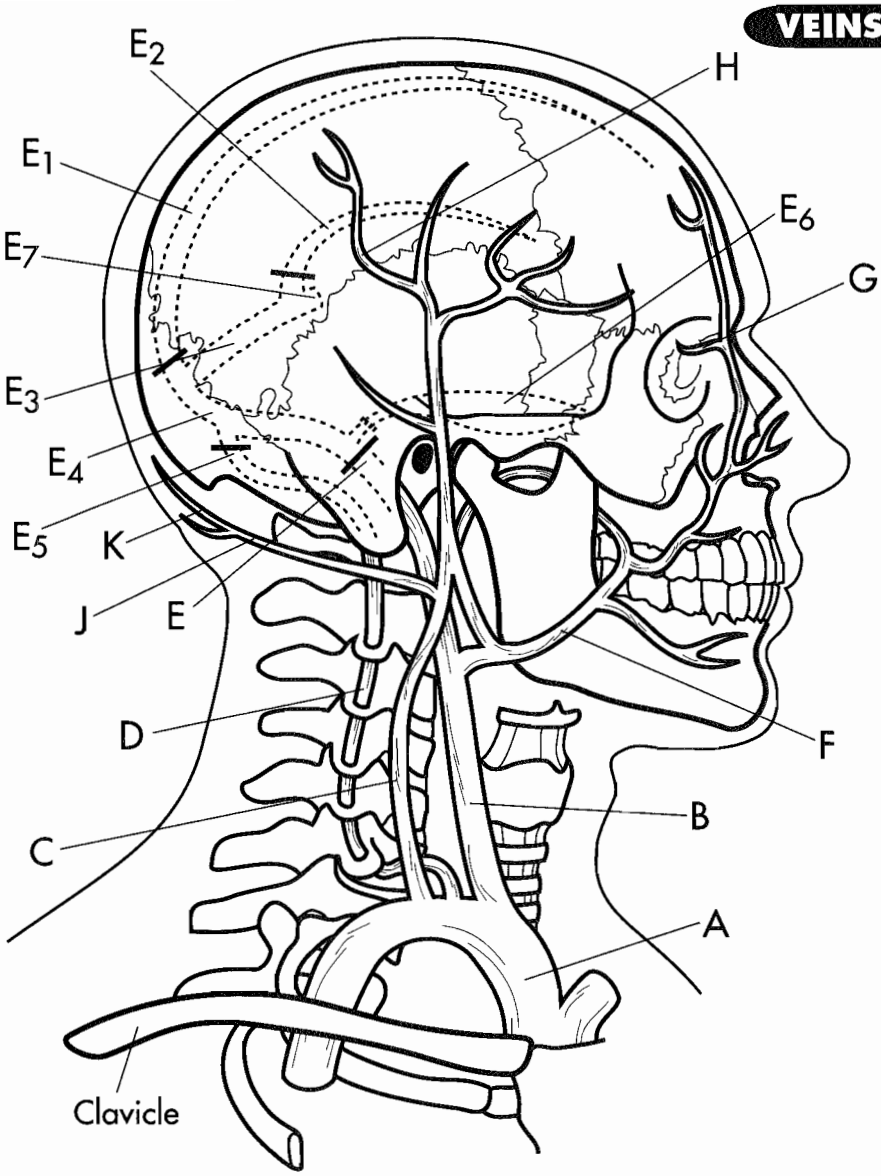
Anterior view

Superior vena cava	A	○
Inferior vena cava	B	○
Left brachiocephalic vein	C_1	○
Right brachiocephalic vein	C_2	○
Left subclavian vein	D_1	○
Right subclavian vein	D_2	○
Left external jugular vein	E_1	○
Right external jugular vein	E_2	○

Left internal jugular vein	F_1	○
Right internal jugular vein	F_2	○
Sigmoid sinus	G	○
Facial vein	H	○
Left cephalic vein	I_1	○
Right cephalic vein	I_2	○
Left axillary vein	J_1	○
Right axillary vein	J_2	○

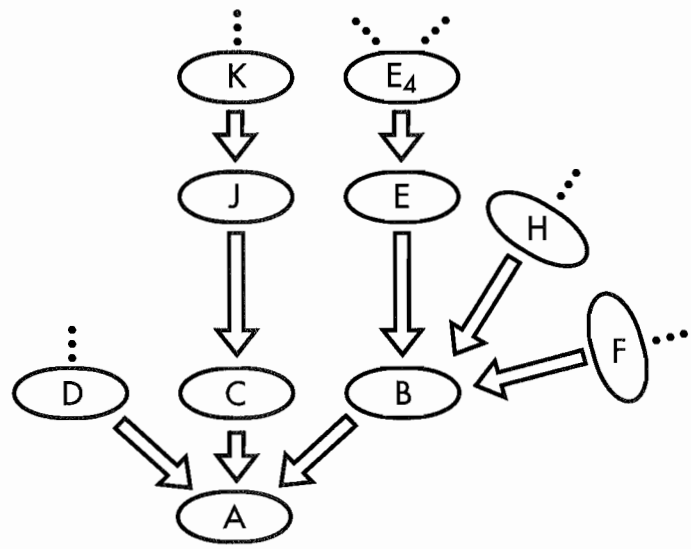
Left brachial vein	K_1	○
Right brachial vein	K_2	○
Left basilic vein	L_1	○
Right basilic vein	L_2	○
Pulmonary veins	M	○
Coronary sinus	N	○
Hepatic vein	O	○
Hepatic portal vein	P	○
Splenic vein	Q	○
Superior mesentery vein	R	○
Left renal vein	S_1	○
Right renal vein	S_2	○
Left inferior mesenteric vein	T	○
Left common iliac vein	U_1	○
Right common iliac vein	U_2	○
Left internal iliac vein	V_1	○
Right internal iliac vein	V_2	○
Left external iliac vein	W_1	○
Right external iliac vein	W_2	○

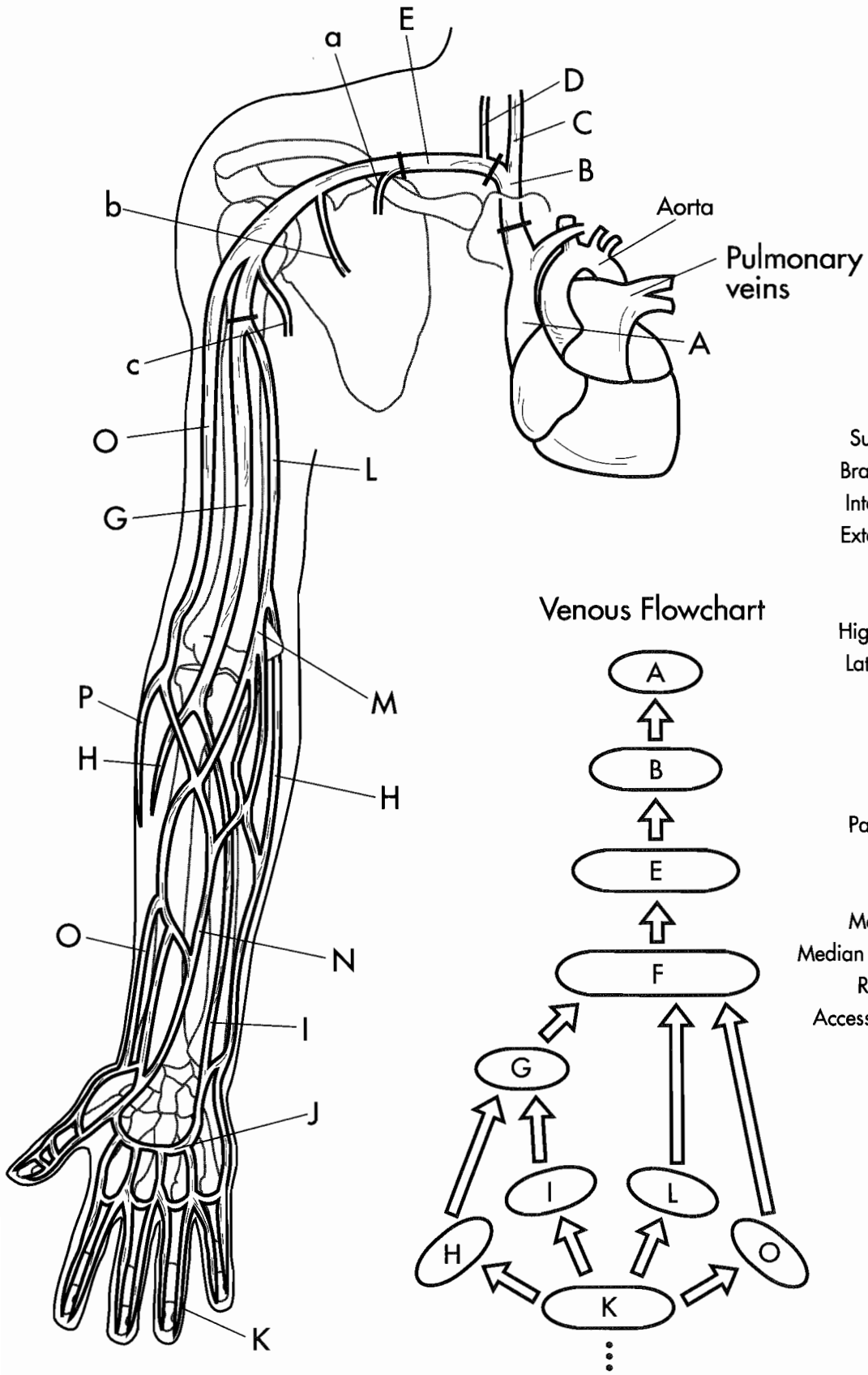
VEINS OF THE HEAD AND NECK



Brachiocephalic vein	A	○
Internal jugular vein	B	○
External jugular vein	C	○
Vertebral vein	D	○
Sigmoid sinus	E	○
Superior sagittal sinus	E_1	○
Inferior sagittal sinus	E_2	○
Straight sinus	E_3	○
Straight sinus (continued)	E_4	○
Occipital sinus	E_5	○
Cavernous sinus	E_6	○
Great cerebral vein	E_7	○
Facial vein	F	○
Ophthalmic vein	G	○
Temporal vein	H	○
Maxillary vein	I	○
Posterior auricular vein	J	○
Occipital vein	K	○

Venous Flowchart

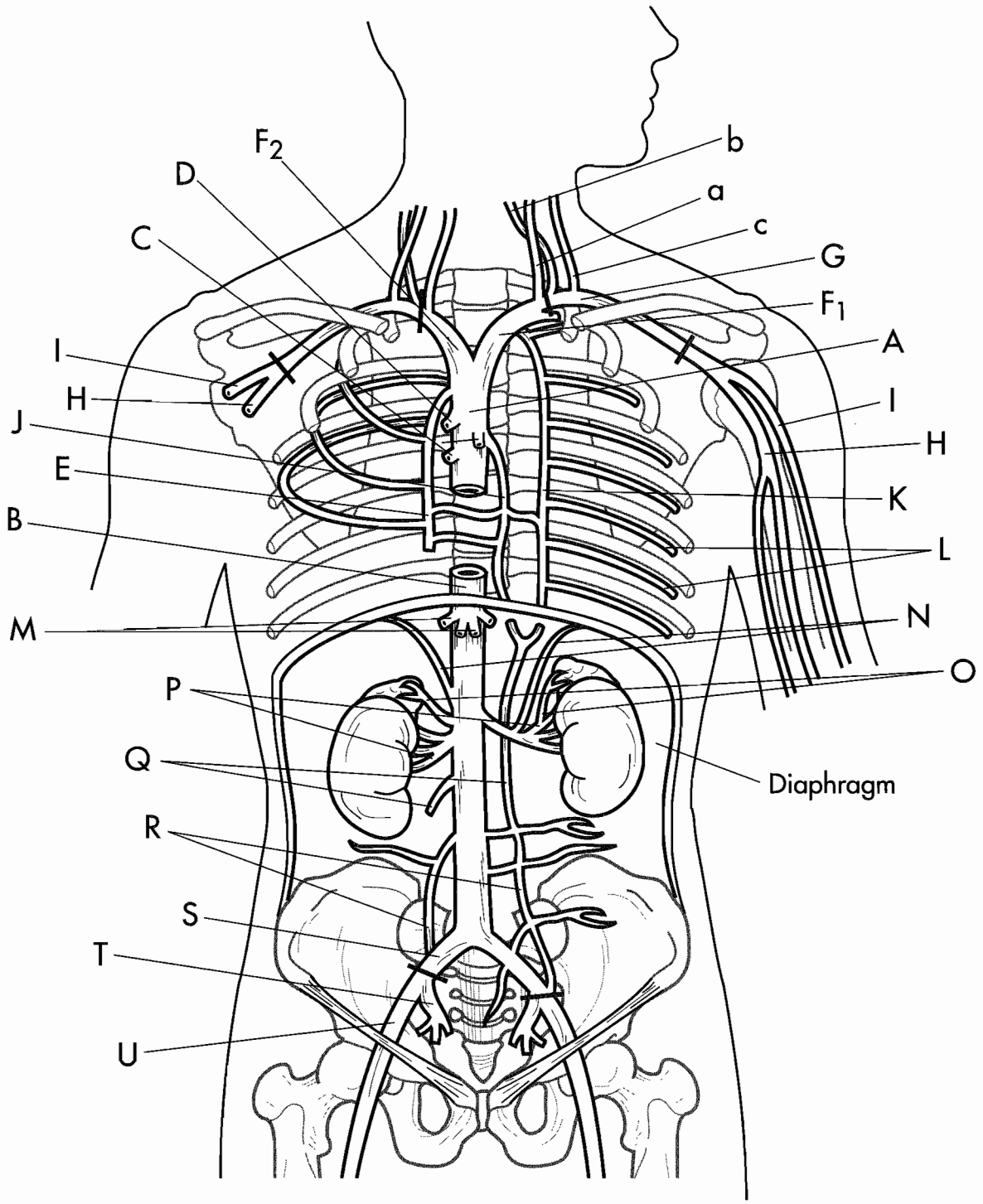




Anterior view

Venous Flowchart

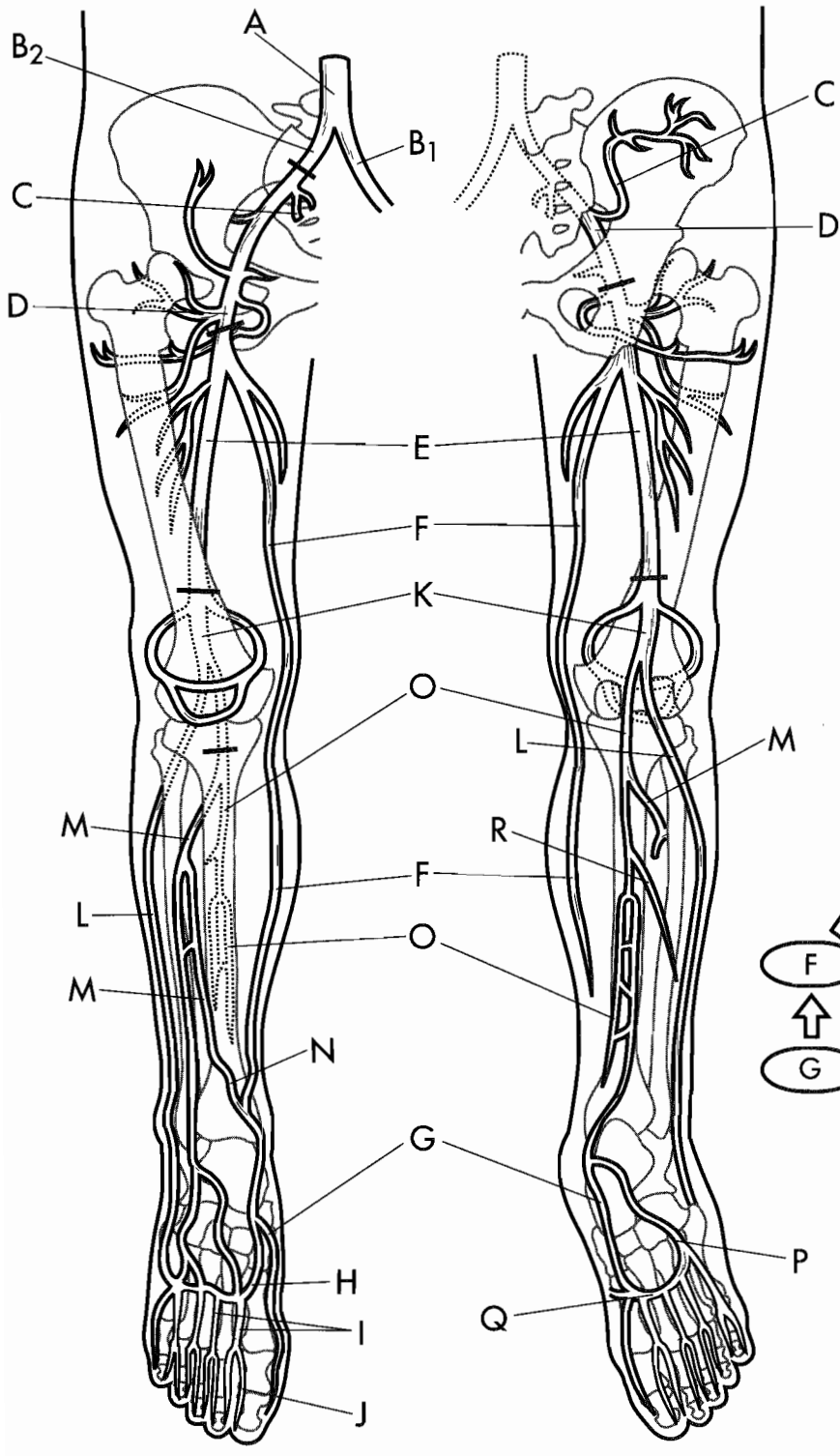
Superior vena cava	A	○
Brachiocephalic vein	B	○
Internal jugular vein	C	○
External jugular vein	D	○
Subclavian vein	E	○
Axillary vein	F	○
Highest thoracic vein	a	○
Lateral thoracic vein	b	○
Subscapular vein	c	○
Brachial vein	G	○
Radial vein	H	○
Ulnar vein	I	○
Palmar venous arch	J	○
Digital veins	K	○
Basilic vein	L	○
Median cubital vein	M	○
Median antebrachial vein	N	○
Right cephalic vein	O	○
Accessory cephalic vein	P	○



Superior vena cava	A	○
Inferior vena cava	B	○
Mediastinal veins	C	○
Esophageal veins	D	○
Internal thoracic vein	E	○
Left brachiocephalic vein	F_1	○
Right brachiocephalic vein	F_2	○
Subclavian vein	G	○

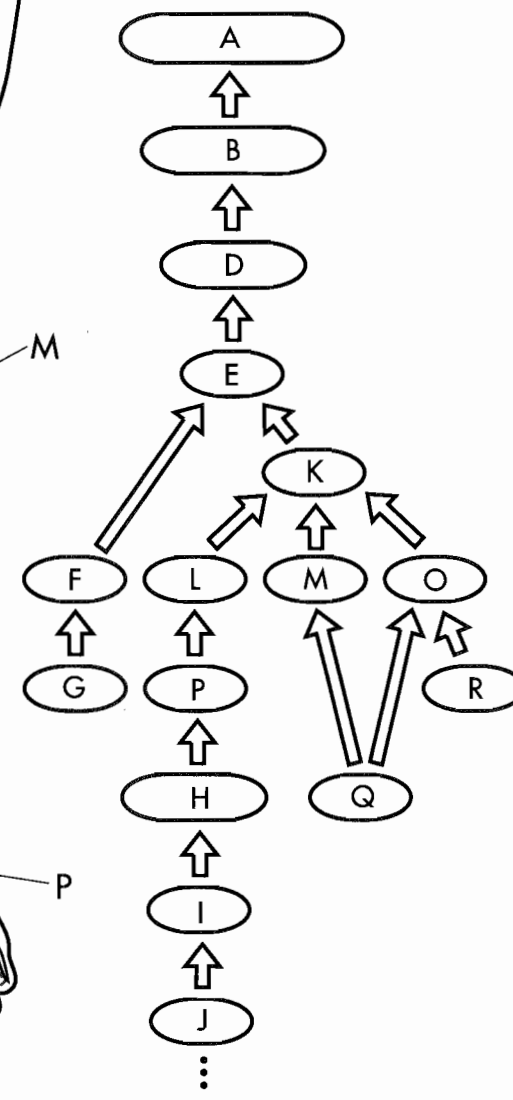
Axillary vein	H	○
Cephalic vein	I	○
Azygous vein	J	○
Hemiazygous vein	K	○
Intercostal veins	L	○
Hepatic veins	M	○
Phrenic veins	N	○
Suprarenal (adrenal) veins	O	○

Renal veins	P	○
Gonadal veins	Q	○
Lumbar veins	R	○
Common iliac veins	S	○
Internal iliac veins	T	○
External iliac veins	U	○
Internal jugular vein	a	○
Vertebral vein	b	○
External jugular vein	c	○

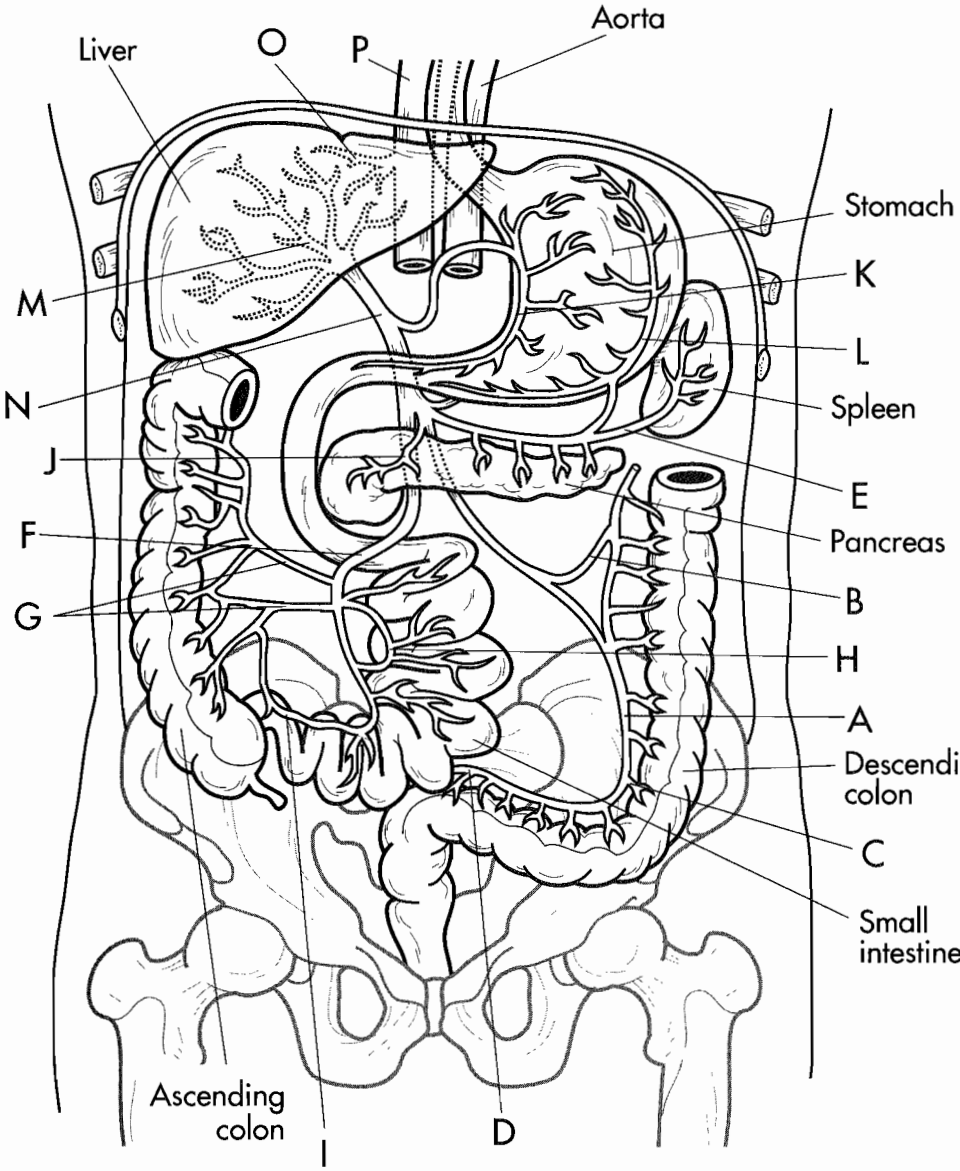


Anterior view *Posterior view*

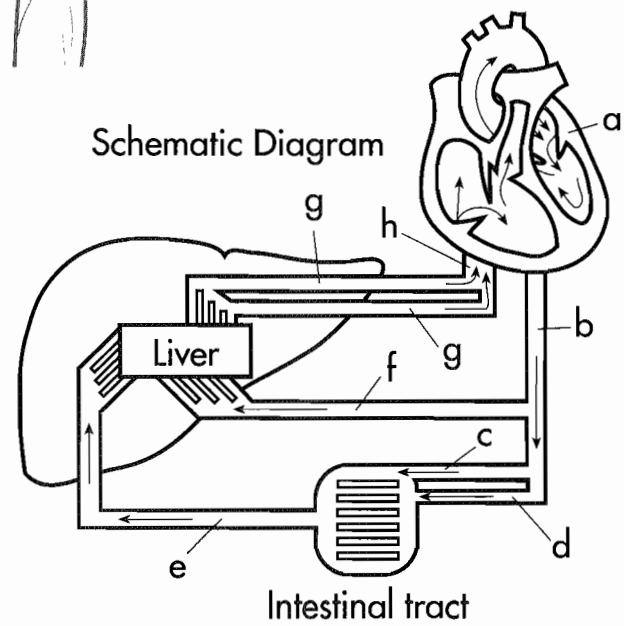
Venous Flowchart



Inferior vena cava	A	○	Great saphenous vein	F	○	Anterior tibial vein	M	○
Left common iliac vein	B_1	○	Medial plantar vein	G	○	Dorsalis pedis veins	N	○
Right common iliac vein	B_2	○	Dorsal venous arch	H	○	Posterior tibial vein	O	○
Internal iliac vein	C	○	Metatarsal veins	I	○	Lateral plantar vein	P	○
External iliac vein	D	○	Digital veins	J	○	Deep venous arch	Q	○
Femoral vein	E	○	Popliteal vein	K	○	Peroneal vein	R	○
			Small saphenous vein	L	○			

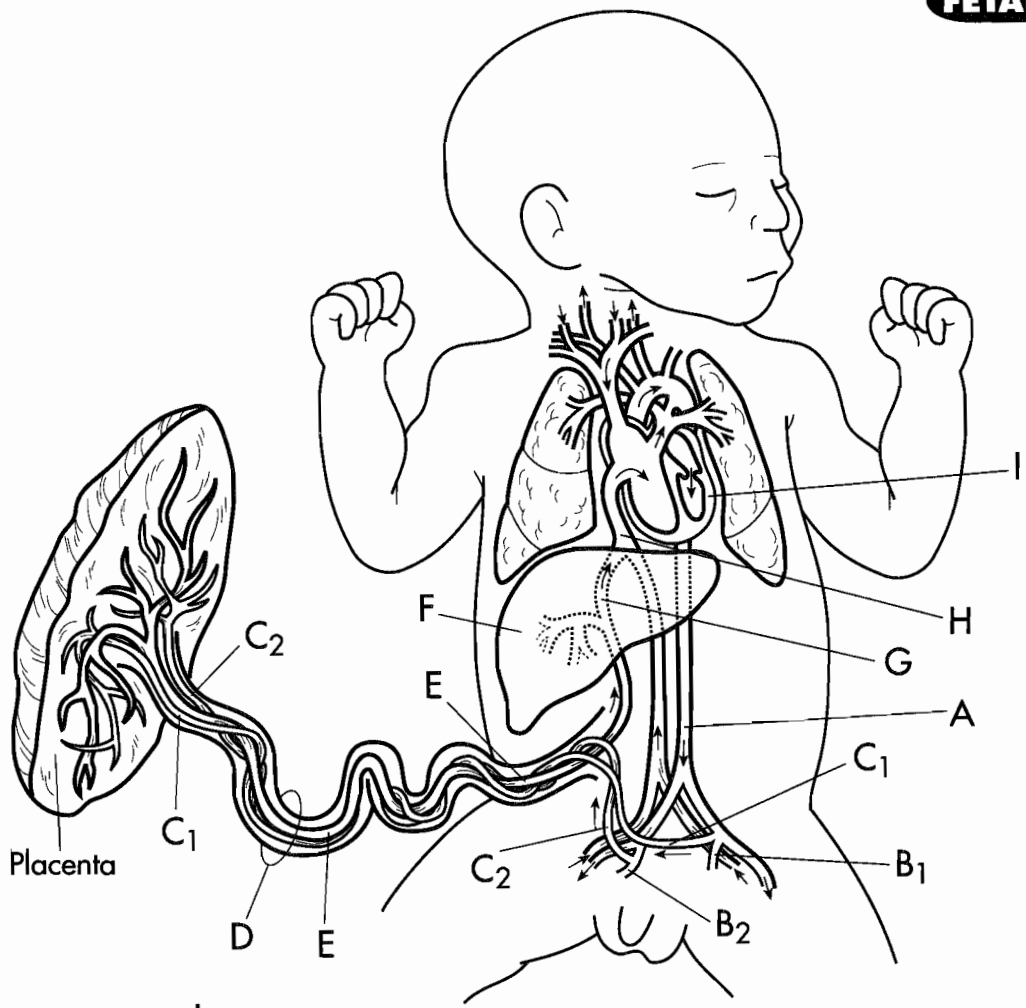


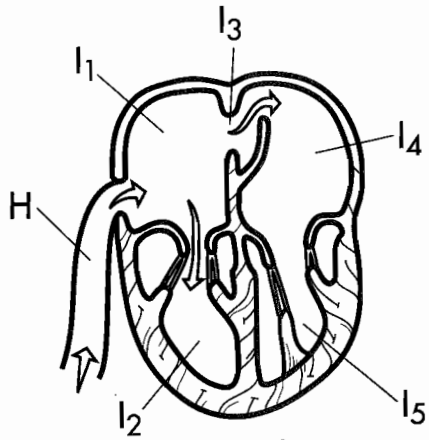
Inferior mesenteric vein	A	❍
Left colic vein	B	❍
Sigmoidal veins	C	❍
Superior rectal veins	D	❍
Splenic vein	E	❍
Superior mesenteric vein	F	❍
Right colic vein	G	❍
Jejunal and ileal veins	H	❍
Ileocolic vein	I	❍
Pancreatoduodenal vein	J	❍
Gastroepiploic vein	K	❍
Gastric vein	L	❍
Cystic vein	M	❍
Hepatic portal vein	N	❍
Hepatic vein	O	❍
Inferior vena cava	P	❍



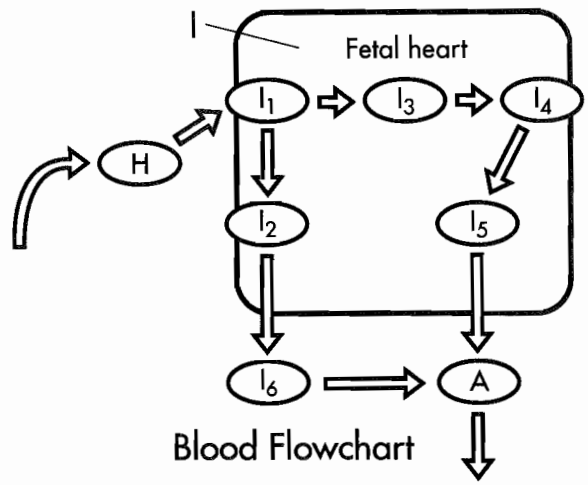
Heart	a	❍
Aorta	b	❍
Superior mesenteric artery	c	❍
Inferior mesenteric artery	d	❍
Hepatic portal vein	e	❍
Hepatic artery	f	❍
Hepatic veins	g	❍
Inferior vena cava	h	❍

FETAL CIRCULATION





Heart Schematic



Blood Flowchart

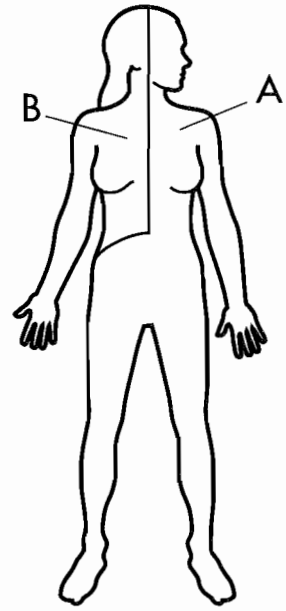
Aorta	A	○	Umbilical vein	E	○	Right ventricle	I_2	○
Left internal iliac artery	B_1	○	Liver	F	○	Foramen ovale	I_3	○
Right internal iliac artery	B_2	○	Ductus venosus	G	○	Left atrium	I_4	○
Left umbilical artery	C_1	○	Inferior vena cava	H	○	Left ventricle	I_5	○
Right umbilical artery	C_2	○	Heart	I	○	Ductus arteriosus	I_6	○
Umbilical cord	D	○	Right atrium of the heart	I_1	○			

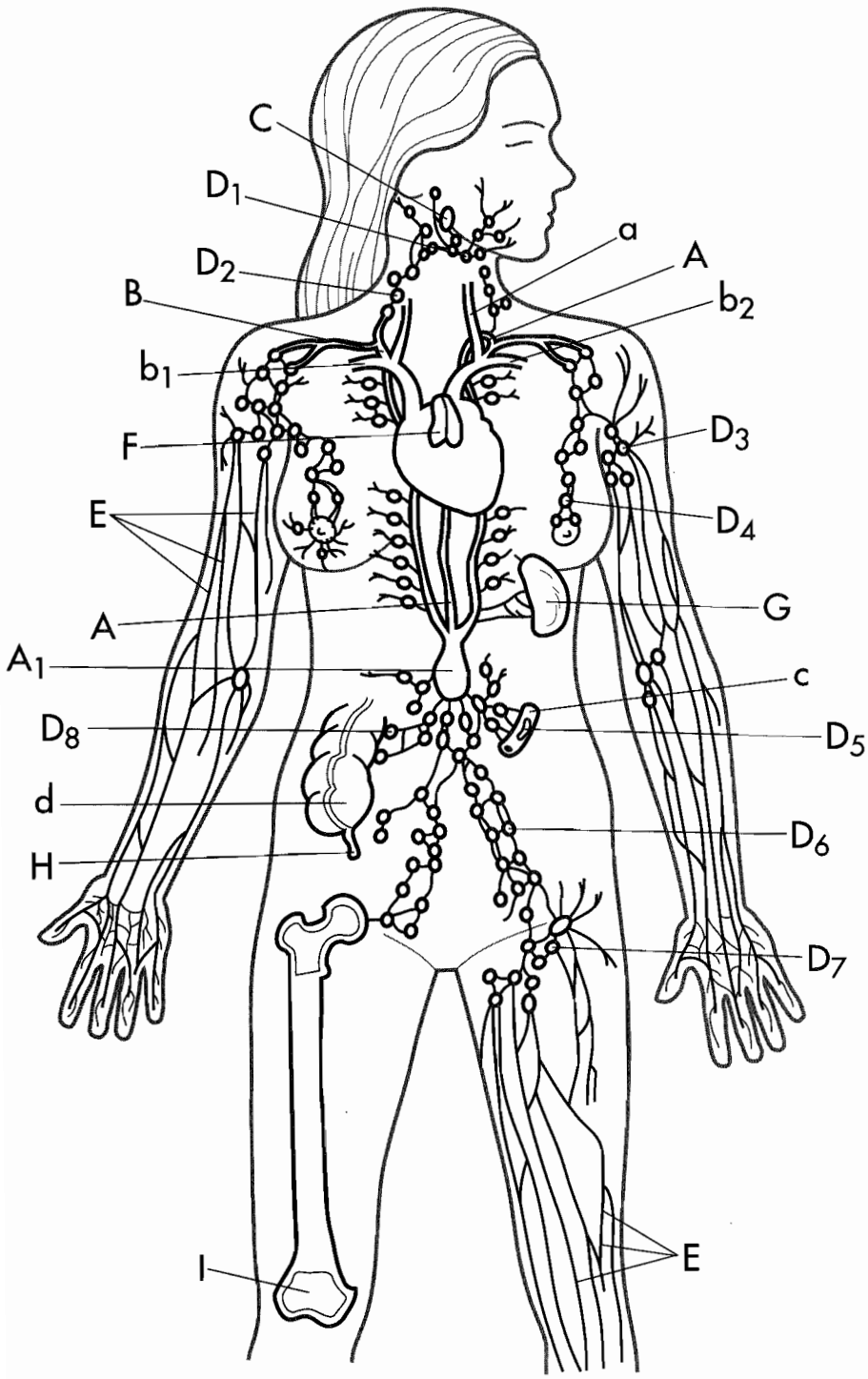
CHAPTER EIGHT:

the LYMPHATIC SYSTEM

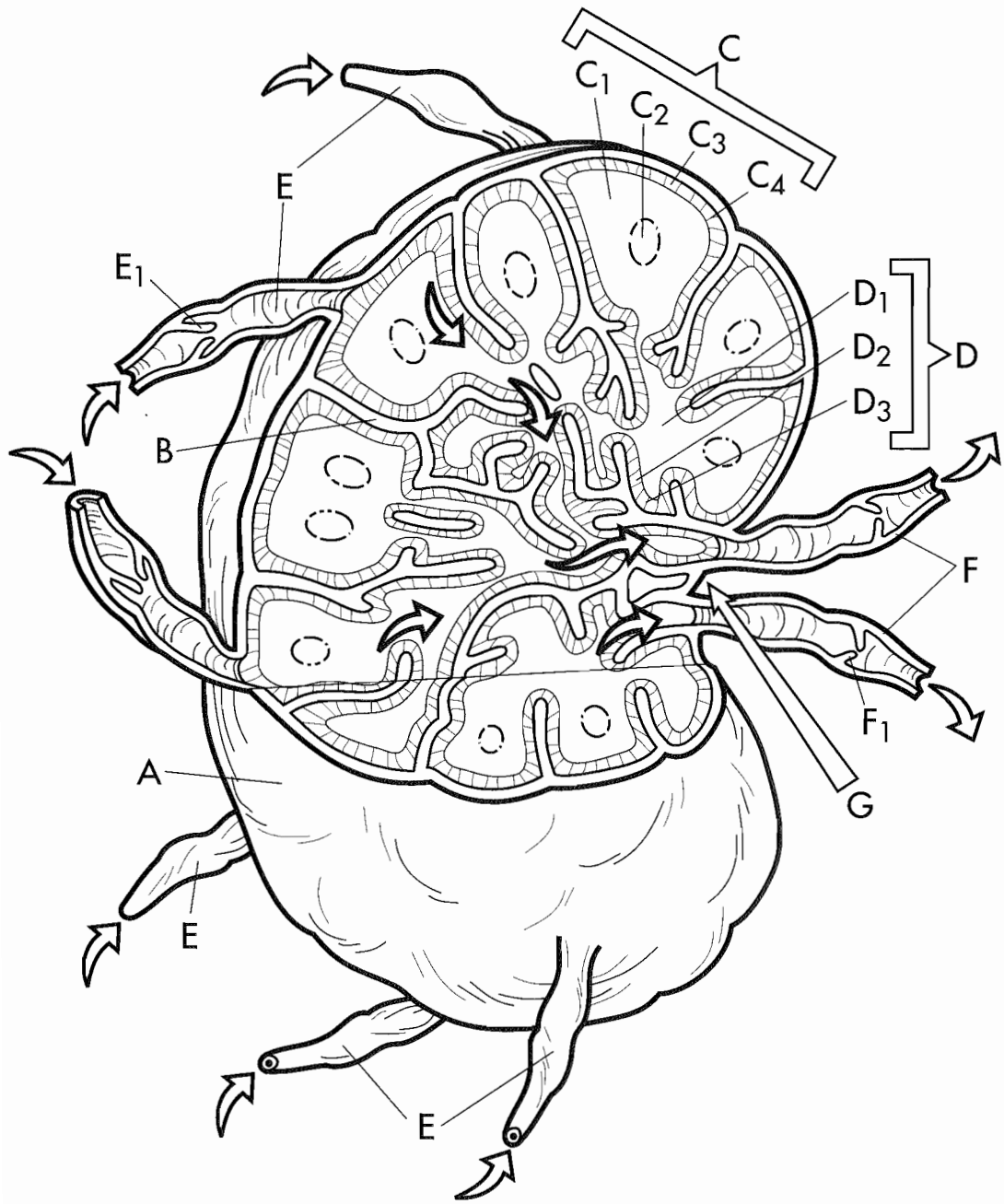
OVERVIEW OF THE LYMPHATIC SYSTEM

Thoracic duct	A	○
Cisterna chyli	A_1	○
Right lymphatic duct	B	○
Palatine tonsil	C	○
Submandibular lymph nodes	D_1	○
Cervical lymph nodes	D_2	○
Axillary lymph nodes	D_3	○
Mammary lymph nodes	D_4	○

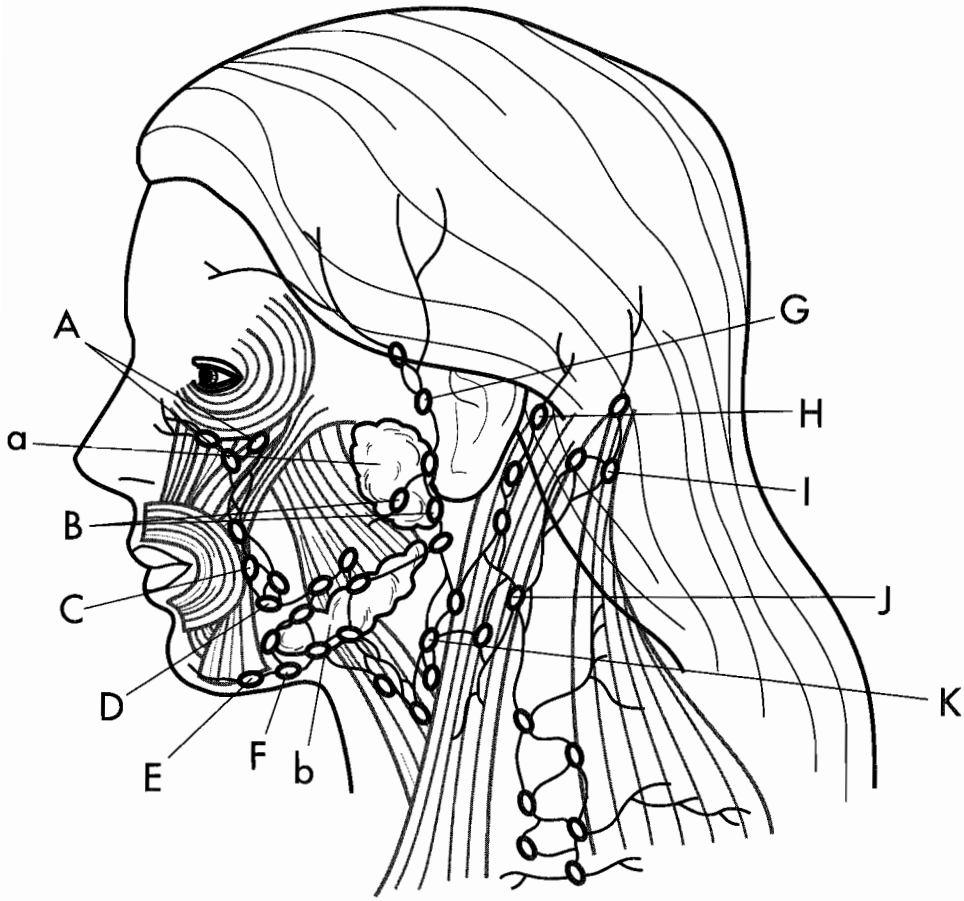




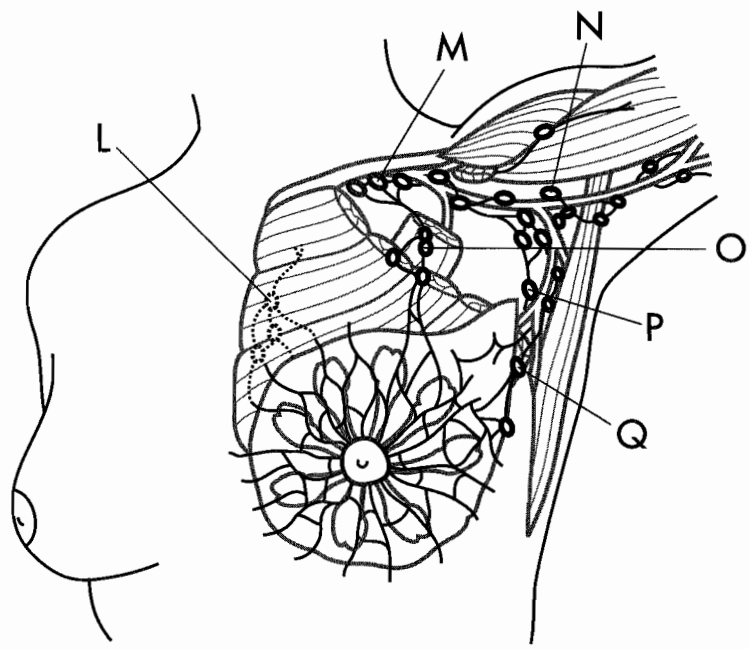
Peyer's patches	D_5	○
Iliac lymph nodes	D_6	○
Inguinal lymph nodes	D_7	○
Intestinal lymph nodes	D_8	○
Lymphatic vessels	E	○
Thymus gland	F	○
Spleen	G	○
Appendix	H	○
Bone marrow	I	○
Internal jugular vein	a	○
Right subclavian vein	b_1	○
Left subclavian vein	b_2	○
Small intestine	c	○
Large intestine	d	○



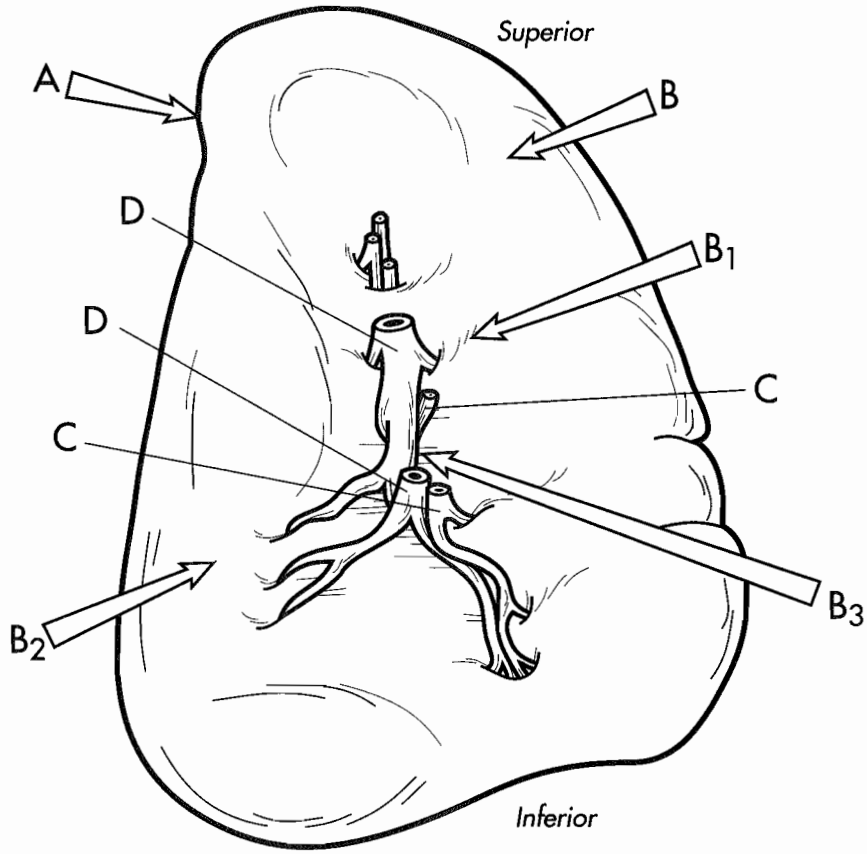
Capsule	A	○
Trabeculae	B	○
Cortex	C	○
Follicles	C_1	○
Germinal centers	C_2	○
Cortical reticular fibers	C_3	○
Cortical sinus	C_4	○
Medulla	D	○
Medullary cords	D_1	○
Medullary sinus	D_2	○
Medullary reticular fibers	D_3	○
Afferent lymphatic vessels	E	○
Afferent valves	E_1	○
Efferent lymph vessels	F	○
Efferent valves	F_1	○
Hilus	G	○

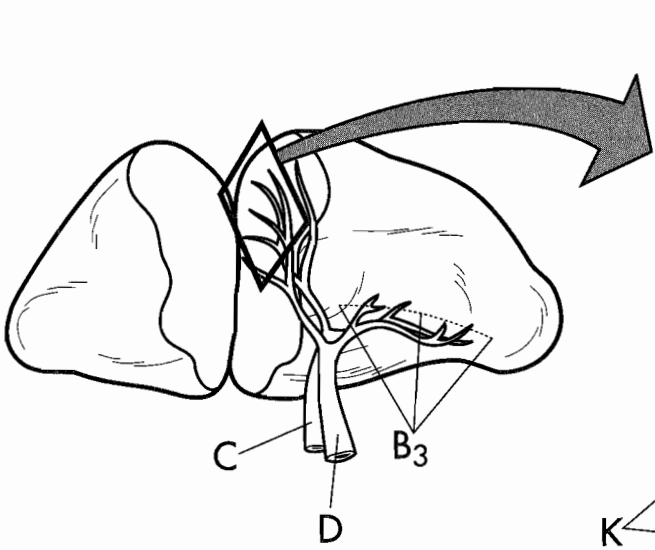


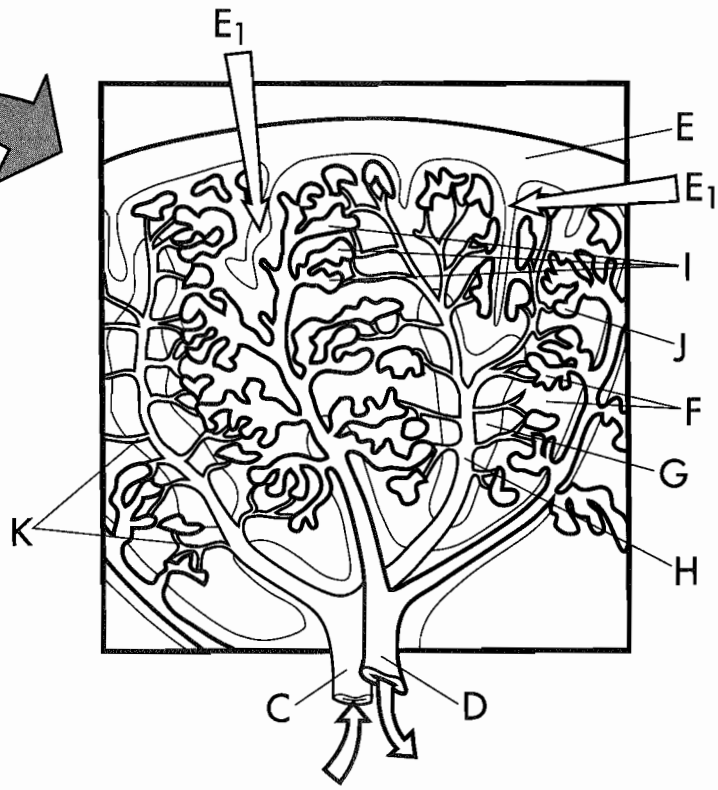
Infraorbital lymph nodes	A	○
Parotid lymph nodes	B	○
Buccal lymph nodes	C	○
Mandibular lymph nodes	D	○
Submental lymph nodes	E	○
Submandibular lymph nodes	F	○
Periauricular lymph nodes	G	○
Retroauricular lymph nodes	H	○
Occipital lymph nodes	I	○
Superficial cervical lymph nodes	J	○
Deep cervical lymph nodes	K	○
Parasternal lymph nodes	L	○
Subclavian lymph nodes	M	○
Lateral axillary lymph nodes	N	○
Central axillary lymph nodes	O	○
Subscapular lymph nodes	P	○
Pectoral lymph nodes	Q	○
Parotid gland	a	○
Submandibular gland	b	○



Diaphragmatic surface	A	○
Visceral surface	B	○
Gastric area	B_1	○
Renal area	B_2	○
Hilus	B_3	○
Splenic artery	C	○
Splenic vein	D	○
Capsule	E	○
Trabeculum	E_1	○
Red pulp	F	○
White pulp	G	○
Trabecular arteries	H	○
Splenic cords	I	○
Venous sinuses	J	○
Capillary network	K	○

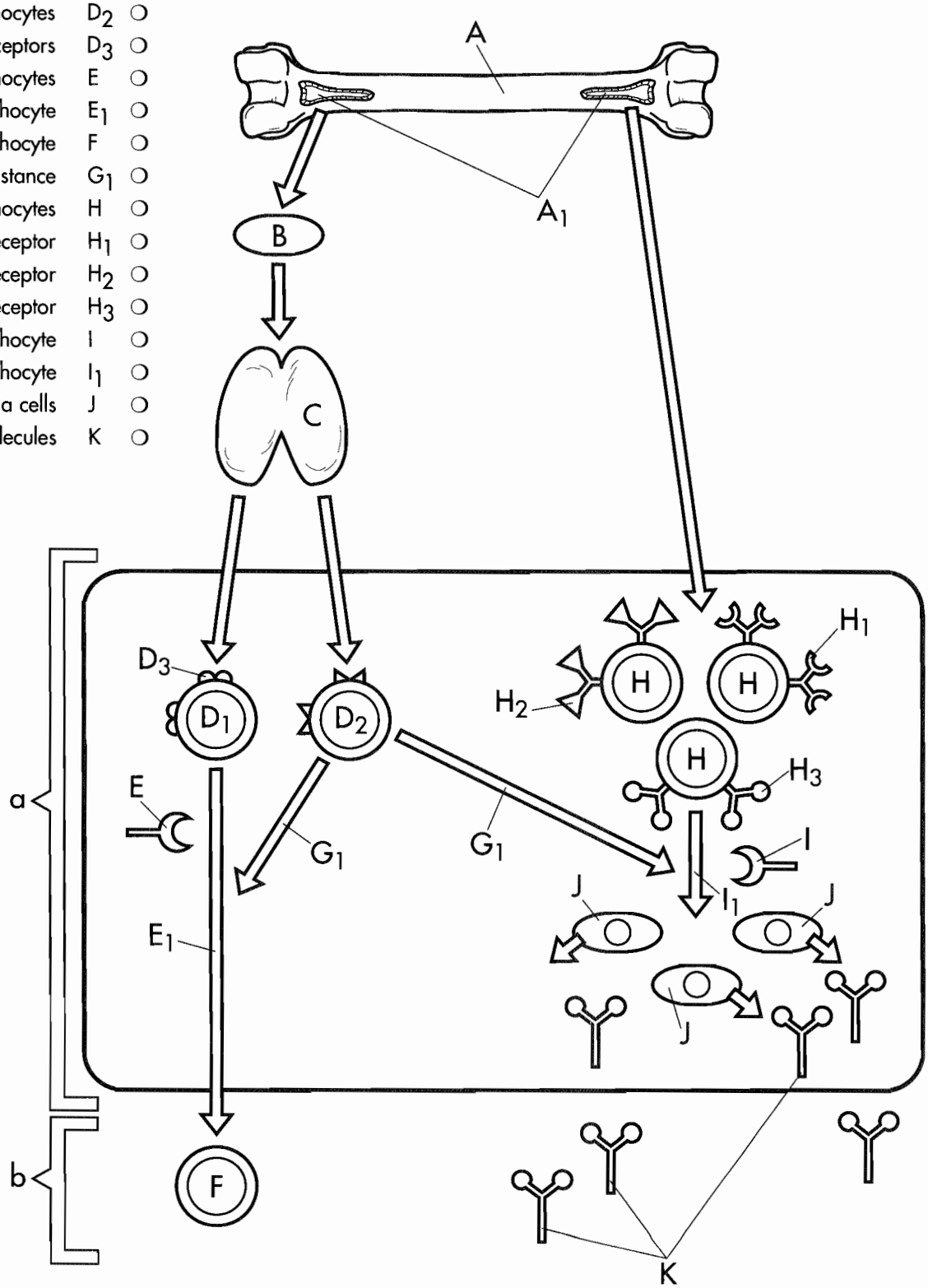






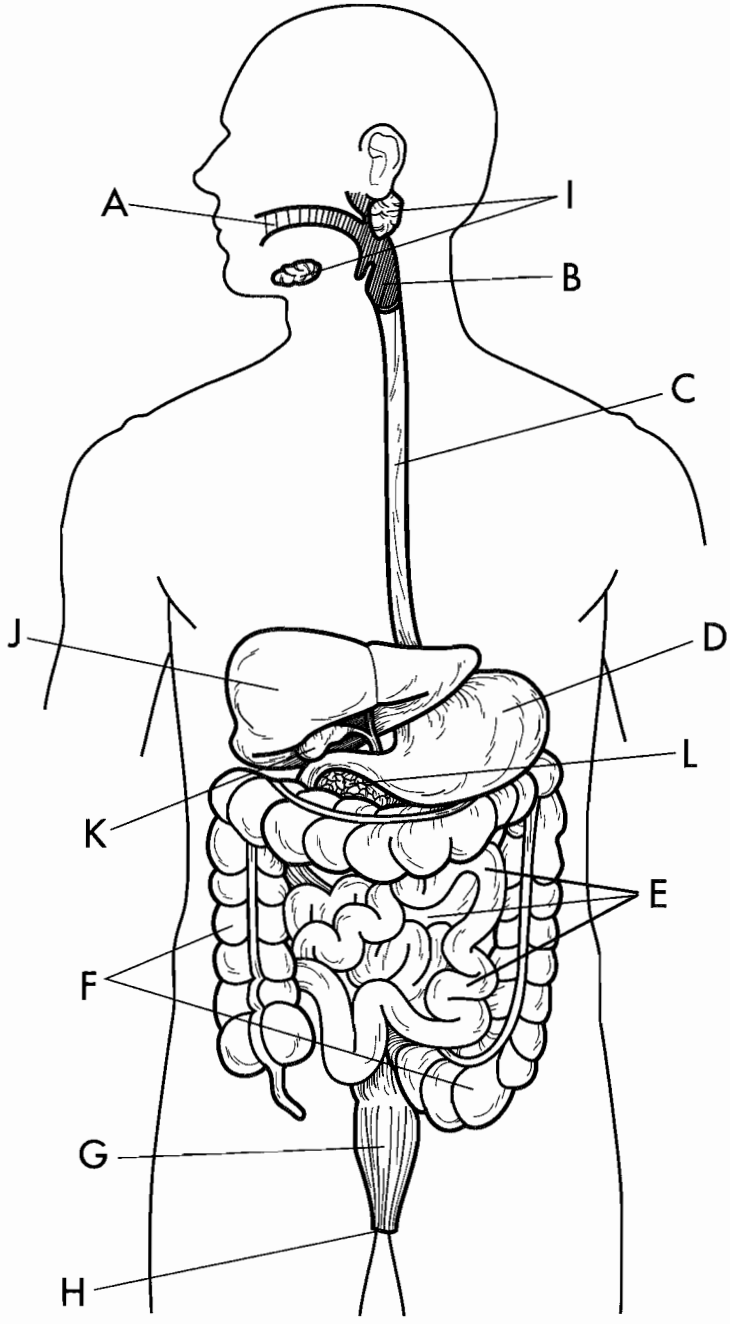
Bone	A	○
Bone marrow	A_1	○
Immature T-lymphocytes	B	○
Thymus gland	C	○
Mature T-lymphocytes	D_1	○
Helper T-lymphocytes	D_2	○
T-lymphocyte receptors	D_3	○
Antigen for T-lymphocytes	E	○
Activation of T-lymphocyte	E_1	○
Cytotoxic T-lymphocyte	F	○
Helper assistance	G_1	○
Mature B-lymphocytes	H	○
B-lymphocyte receptor	H_1	○
B-lymphocyte receptor	H_2	○
B-lymphocyte receptor	H_3	○
Antigen for B-lymphocyte	I	○
Activation of B-lymphocyte	I_1	○
Plasma cells	J	○
Antibody molecules	K	○

Lymphatic tissue	a	○
Circulation	b	○

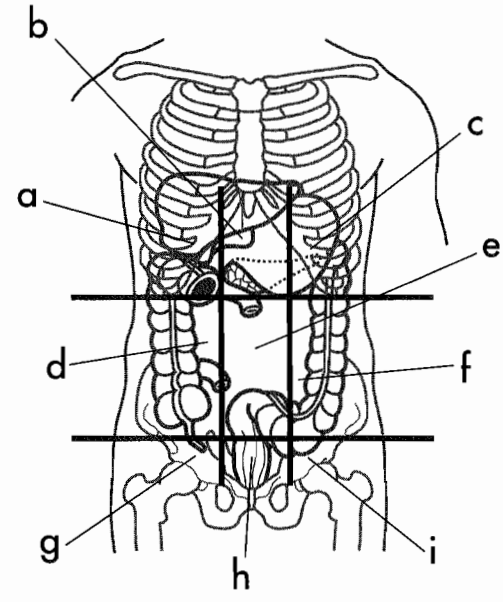


CHAPTER NINE:

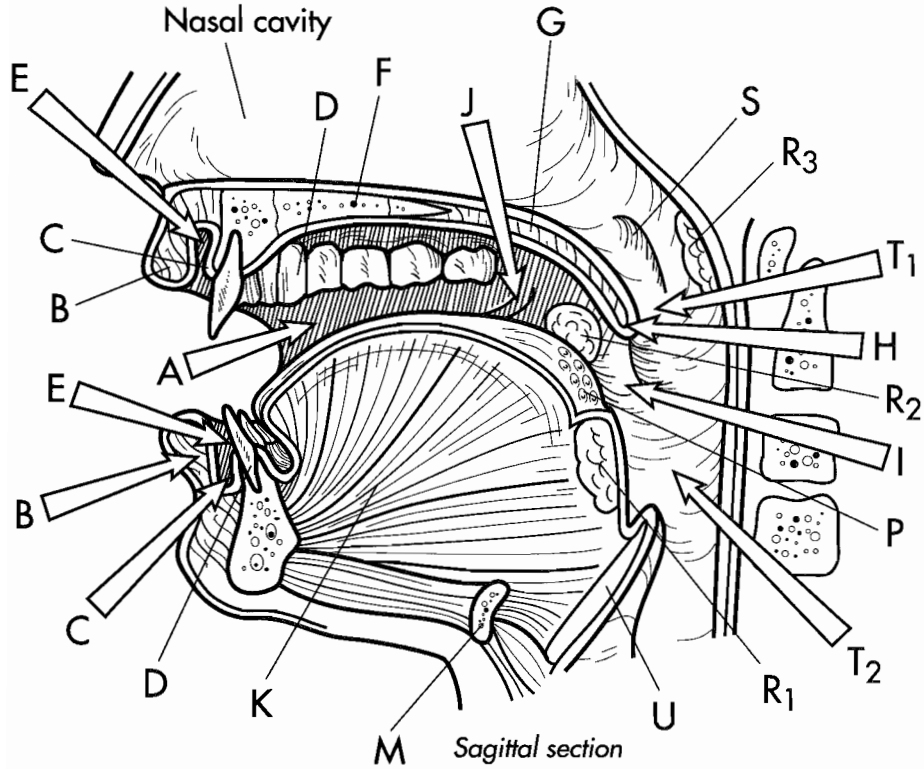
the DIGESTIVE SYSTEM



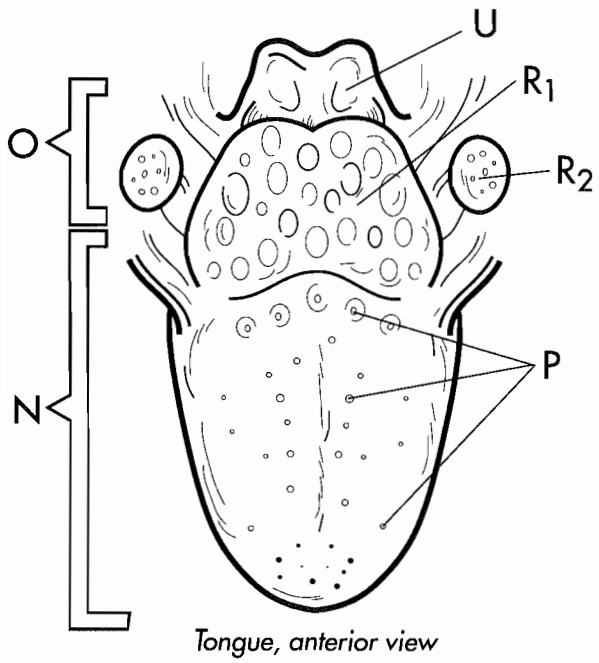
Oral cavity	A	❍
Pharynx	B	❍
Esophagus	C	❍
Stomach	D	❍
Small intestine	E	❍
Large intestine	F	❍
Rectum	G	❍
Anus	H	❍
Salivary glands	I	❍
Liver	J	❍
Gallbladder	K	❍
Pancreas	L	❍
Right upper quadrant	a	❍
Epigastric region	b	❍
Left upper quadrant	c	❍
Right lumbar region	d	❍
Umbilical region	e	❍
Left lumbar region	f	❍
Right inguinal region	g	❍
Hypogastric region	h	❍
Left inguinal region	i	❍



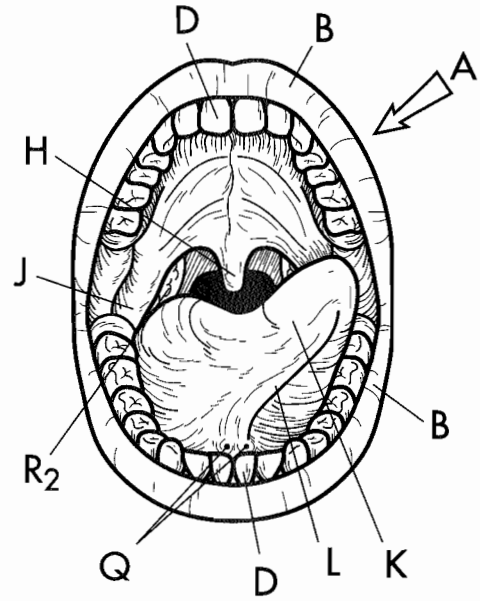
Cheek	A ○
Lips	B ○
Vestibule	C ○
Teeth	D ○
Gingiva	E ○
Hard palate	F ○
Soft palate	G ○
Uvula	H ○
Palatopharyngeal arch	I ○
Palatoglossal arch	J ○
Tongue	K ○
Lingual frenulum	L ○
Hyoid bone	M ○
Body	N ○
Root	O ○
Papillae	P ○
Sublingual salivary glands	Q ○
Lingual tonsils	R_1 ○
Palatine tonsils	R_2 ○
Pharyngeal tonsil	R_3 ○
Eustachian tube	S ○
Nasopharynx	T_1 ○
Oropharynx	T_2 ○
Epiglottis	U ○



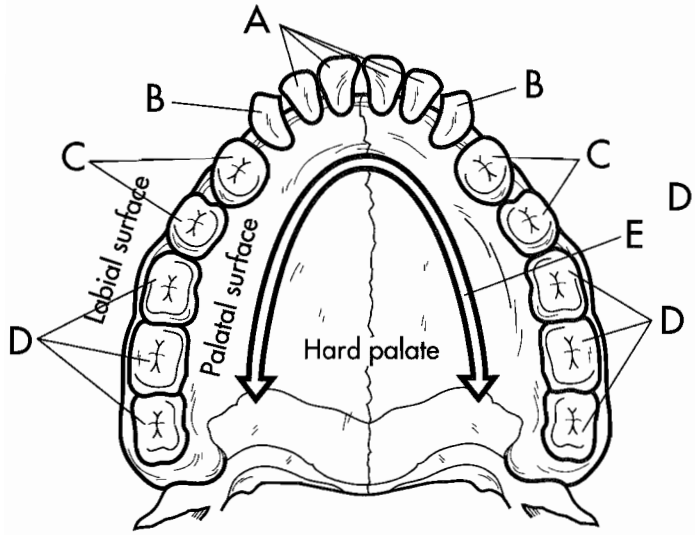
Sagittal section



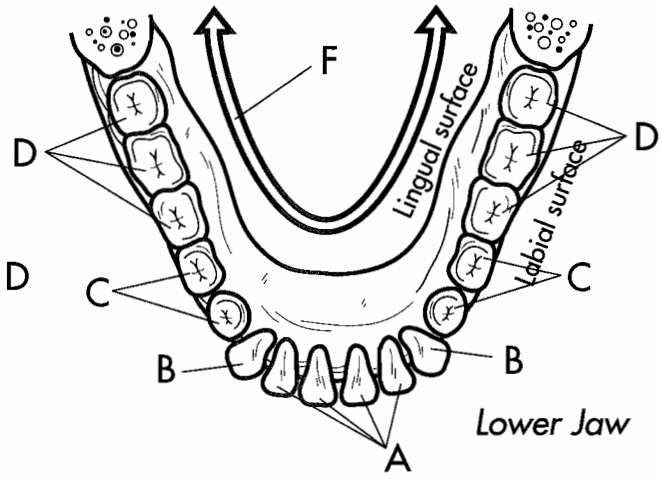
Tongue, anterior view



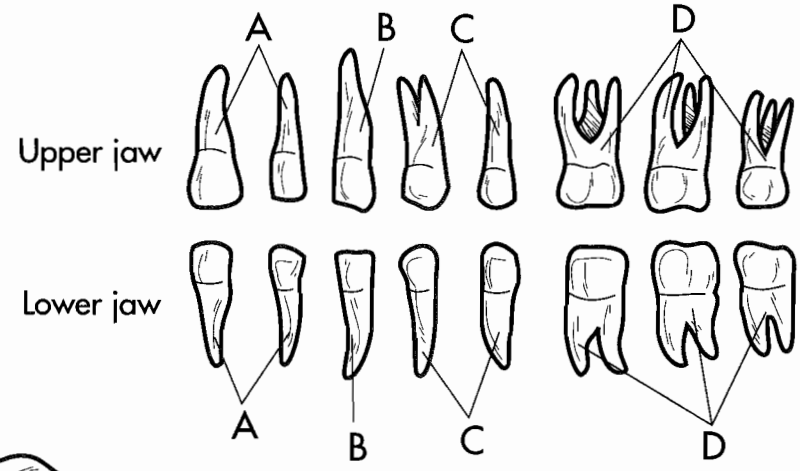
Anterior view

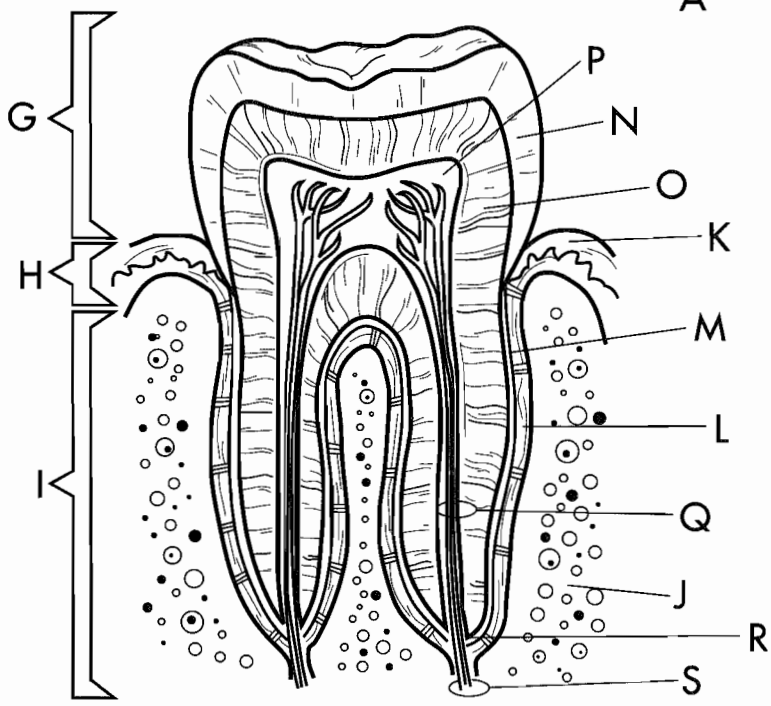


Upper Jaw

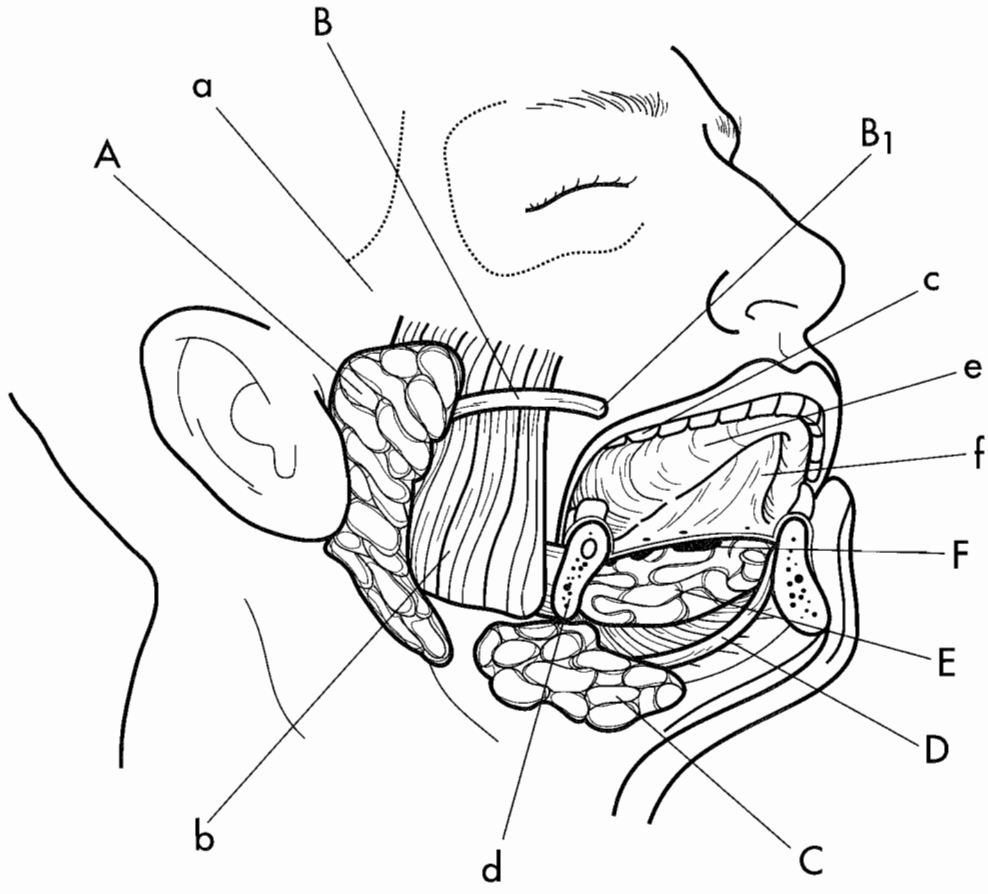


Lower Jaw

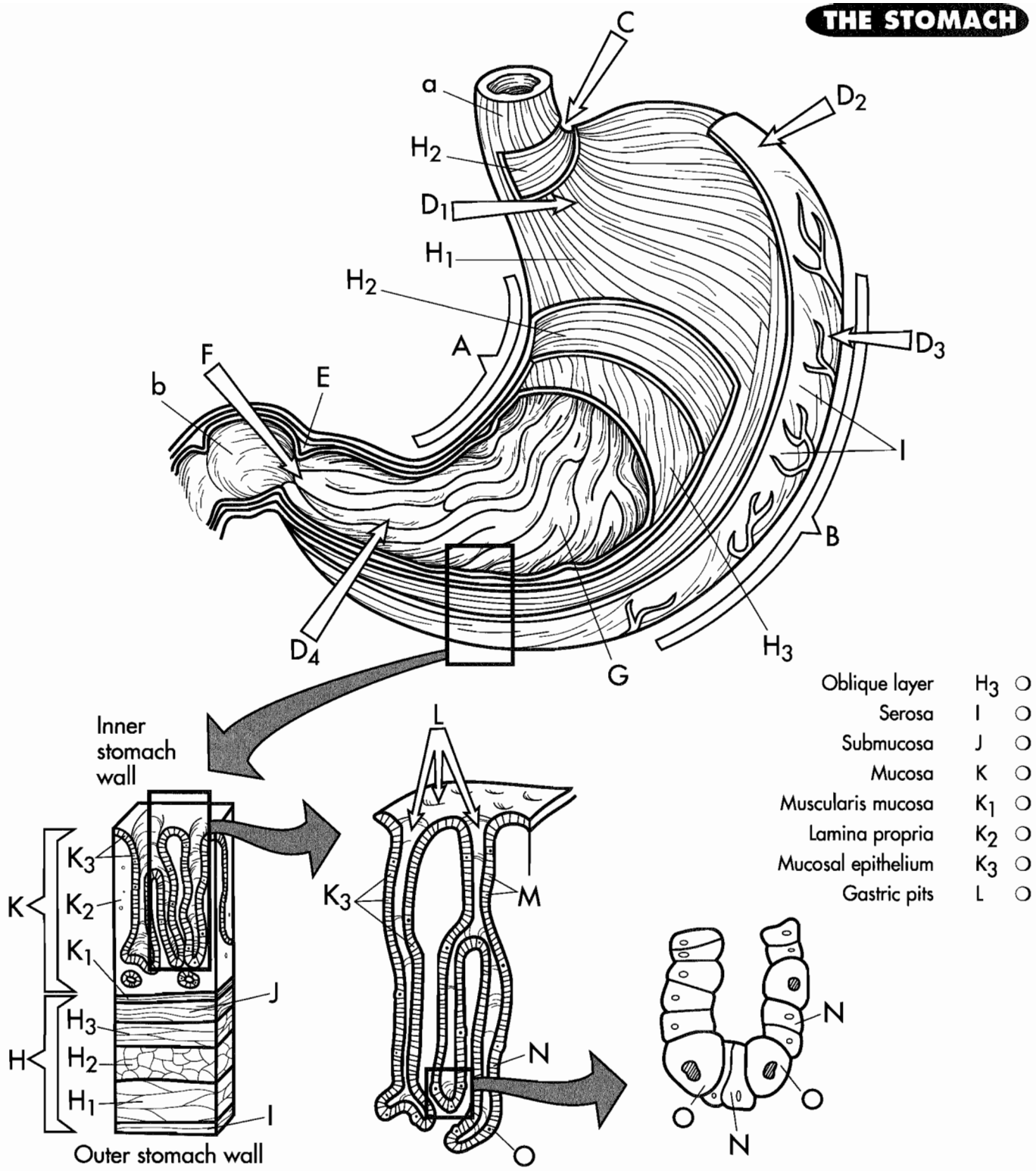




Incisors	A	○
Cuspids	B	○
Bicuspids	C	○
Molars	D	○
Upper dental arch	E	○
Lower dental arch	F	○
Crown	G	○
Neck	H	○
Root	I	○
Alveolar bone	J	○
Gingiva	K	○
Periodontal ligament	L	○
Cementum	M	○
Enamel	N	○
Dentin	O	○
Pulp cavity	P	○
Root canal	Q	○
Apical foramen	R	○
Nerves	S	○



Parotid glands	A ❍
Parotid duct (Stenson's duct)	B ❍
Opening of the parotid duct	B_1 ❍
Submandibular gland	C ❍
Submandibular duct (Wharton's duct)	D ❍
Sublingual glands	E ❍
Sublingual ducts	F ❍
Zygomatic arch	a ❍
Masseter muscle	b ❍
Second maxillary molar	c ❍
Mandible	d ❍
Lingual frenulum	e ❍
Tongue	f ❍



Oblique layer	H_3	○
Serosa	I	○
Submucosa	J	○
Mucosa	K	○
Muscularis mucosa	K_1	○
Lamina propria	K_2	○
Mucosal epithelium	K_3	○
Gastric pits	L	○

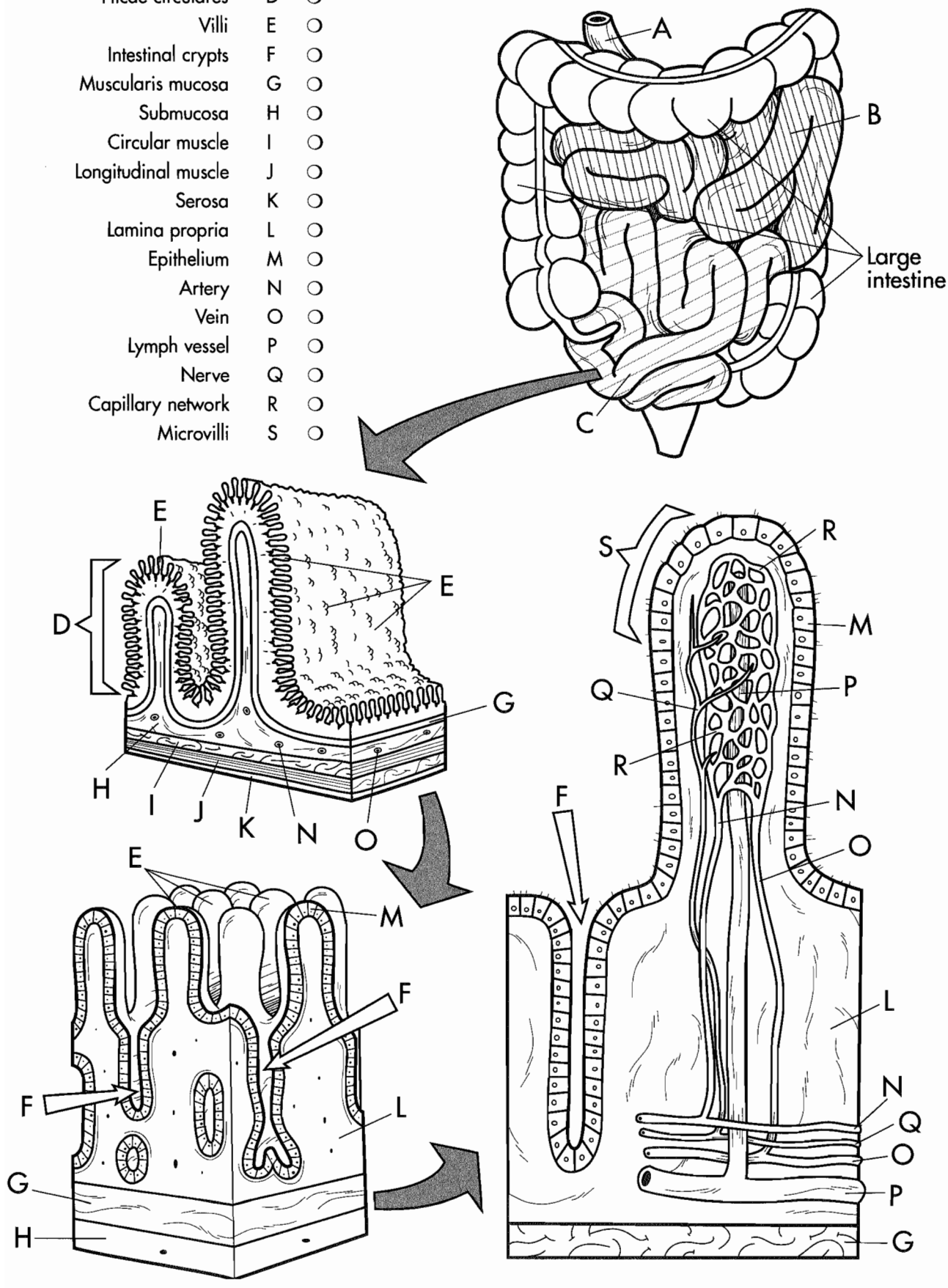
Lesser curvature	A	○
Greater curvature	B	○
Cardiac sphincter	C	○
Cardia	D_1	○
Fundus	D_2	○
Body	D_3	○
Pylorus	D_4	○

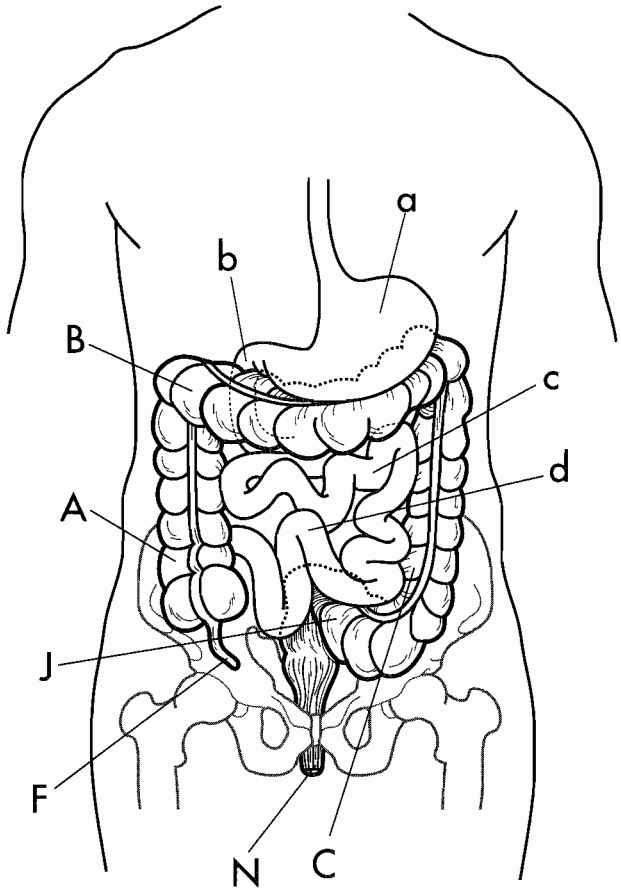
Pyloric sphincter	E	○
Pyloric outlet	F	○
Rugae	G	○
Muscularis externa	H	○
Longitudinal layer	H_1	○
Middle circular layer	H_2	○

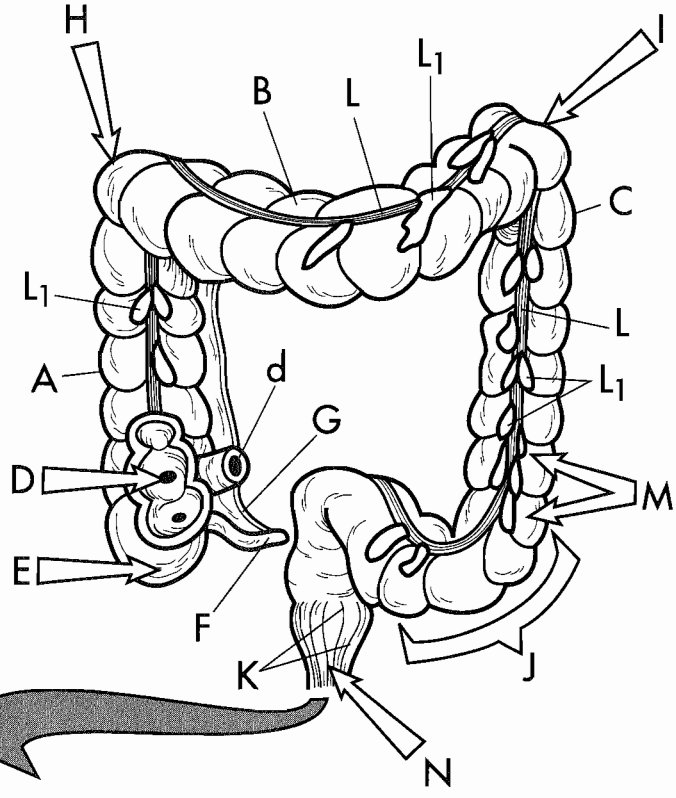
Neck mucous cells	M	○
Chief cells	N	○
Parietal cell	O	○
Esophagus	a	○
Duodenum	b	○

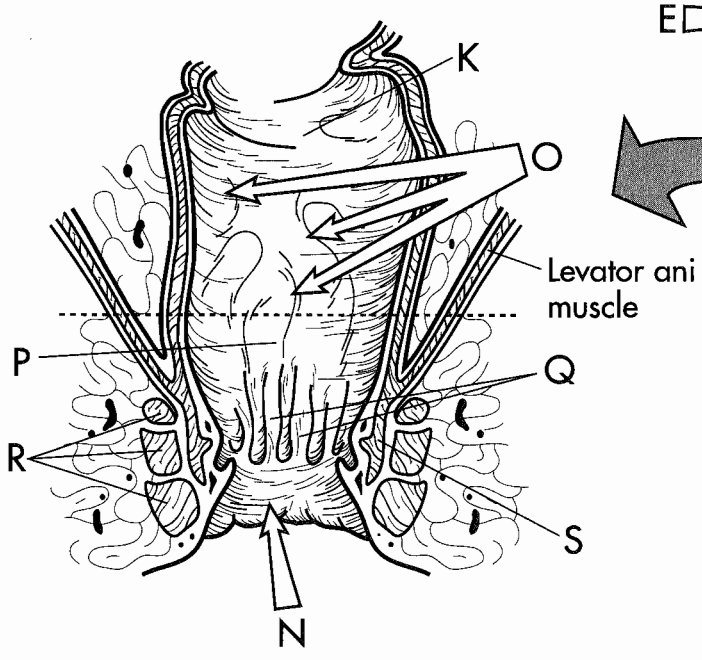
THE SMALL INTESTINE

Duodenum	A	○
Jejunum	B	○
Ileum	C	○
Plicae circulares	D	○
Villi	E	○
Intestinal crypts	F	○
Muscularis mucosa	G	○
Submucosa	H	○
Circular muscle	I	○
Longitudinal muscle	J	○
Serosa	K	○
Lamina propria	L	○
Epithelium	M	○
Artery	N	○
Vein	O	○
Lymph vessel	P	○
Nerve	Q	○
Capillary network	R	○
Microvilli	S	○





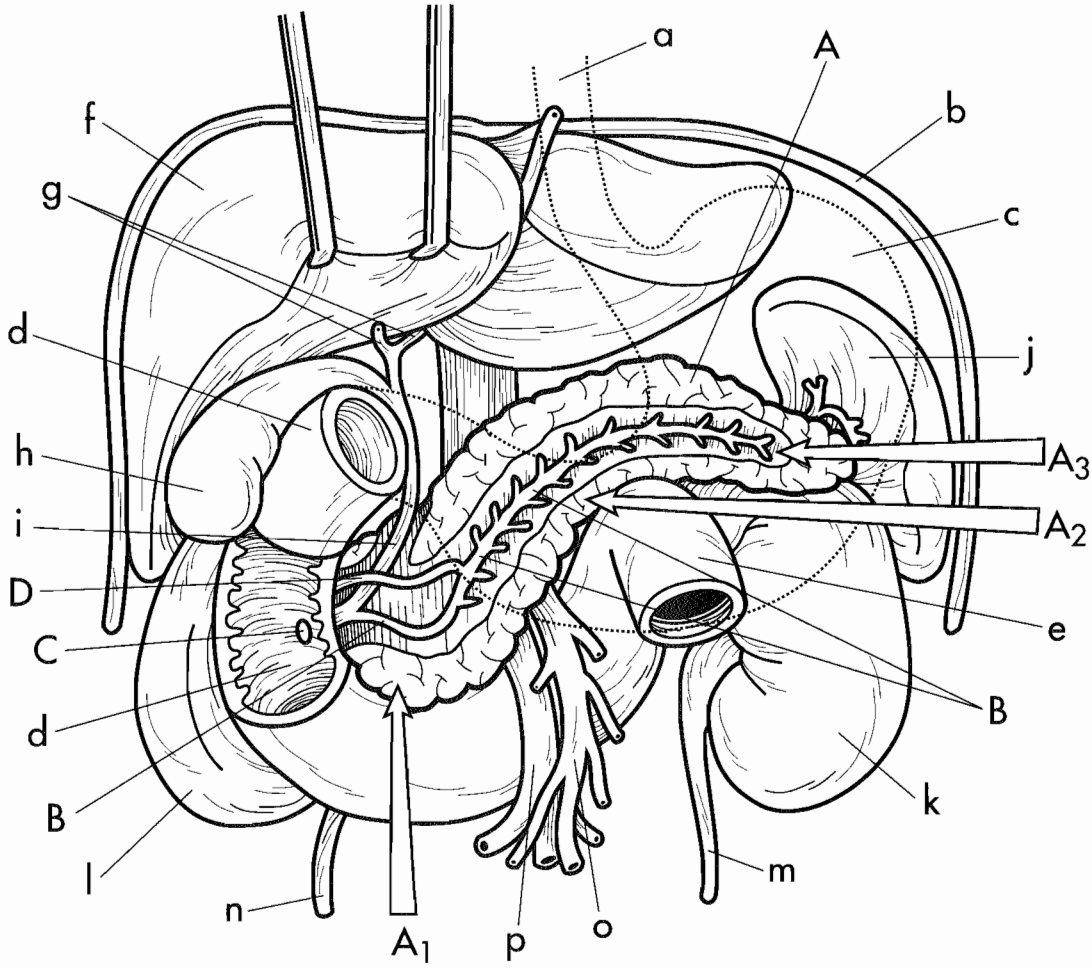


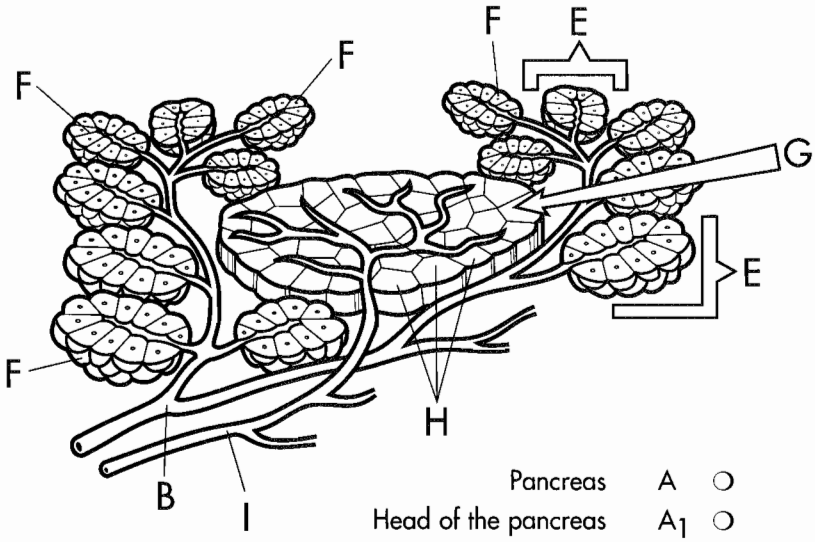


Ascending colon	A	○
Transverse colon	B	○
Descending colon	C	○
Ileocecal valve	D	○
Cecum	E	○
Vermiform appendix	F	○
Mesoappendix	G	○
Hepatic flexure	H	○
Splenic flexure	I	○
Sigmoid colon	J	○
Rectum	K	○

Taeniae coli	L	○
Epiploic appendages	L_1	○
Haustra	M	○
Anus	N	○
Plicae transversales	O	○
Anal canal	P	○
Anal columns	Q	○
External anal sphincter	R	○
Internal anal sphincter	S	○
Stomach	a	○
Duodenum	b	○
Jejunum	c	○
Ileum	d	○

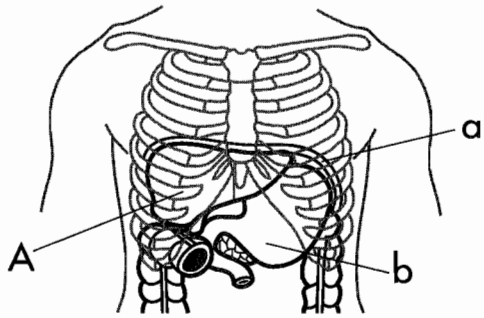
THE PANCREAS (EXOCRINE FUNCTION)

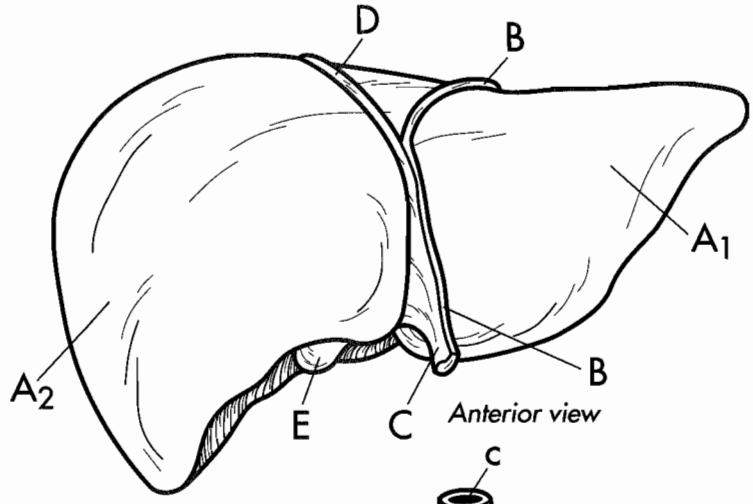


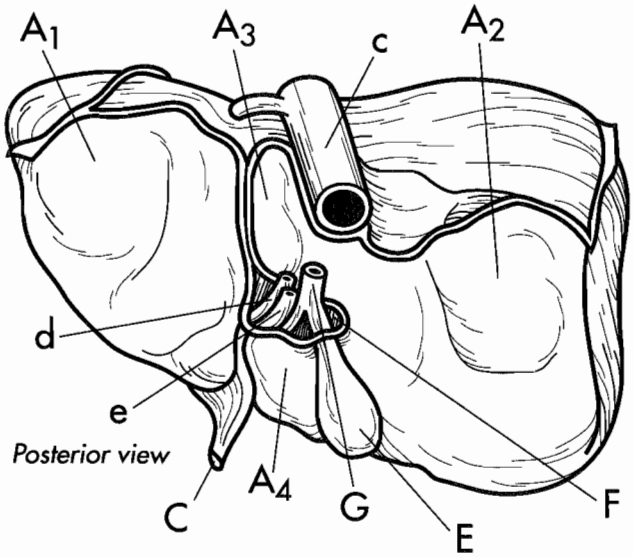


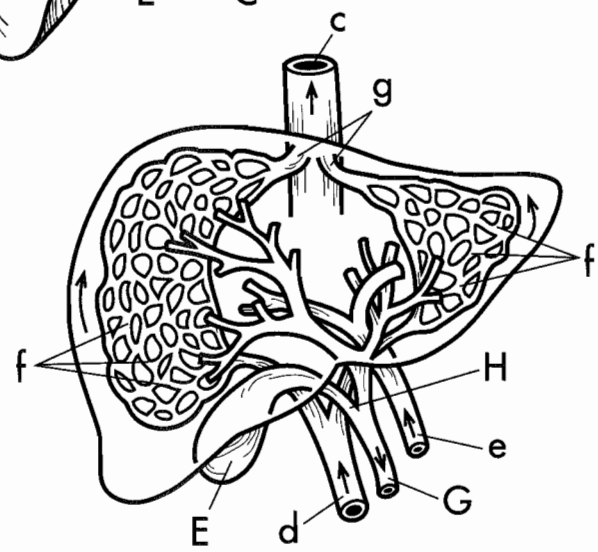
Pancreas	A	○
Head of the pancreas	A_1	○
Body of the pancreas	A_2	○
Tail of the pancreas	A_3	○
Main pancreatic duct	B	○
Ampulla of Vater	C	○
Accessory pancreatic duct	D	○
Acinus	E	○
Exocrine cells	F	○

Islets of Langerhans	G	○
Exocrine cells	H	○
Blood vessel	I	○
Esophagus	a	○
Diaphragm	b	○
Stomach	c	○
Duodenum	d	○
Jejunum	e	○
Liver	f	○
Hepatic ducts	g	○
Gallbladder	h	○
Common bile duct	i	○
Spleen	j	○
Left kidney	k	○
Right kidney	l	○
Left ureter	m	○
Right ureter	n	○
Superior mesentery artery	o	○
Superior mesentery vein	p	○

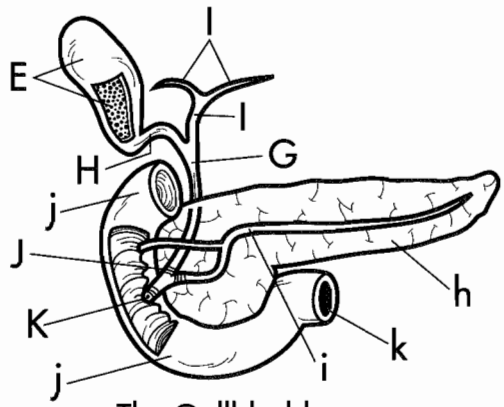








Hepatic Blood Supply



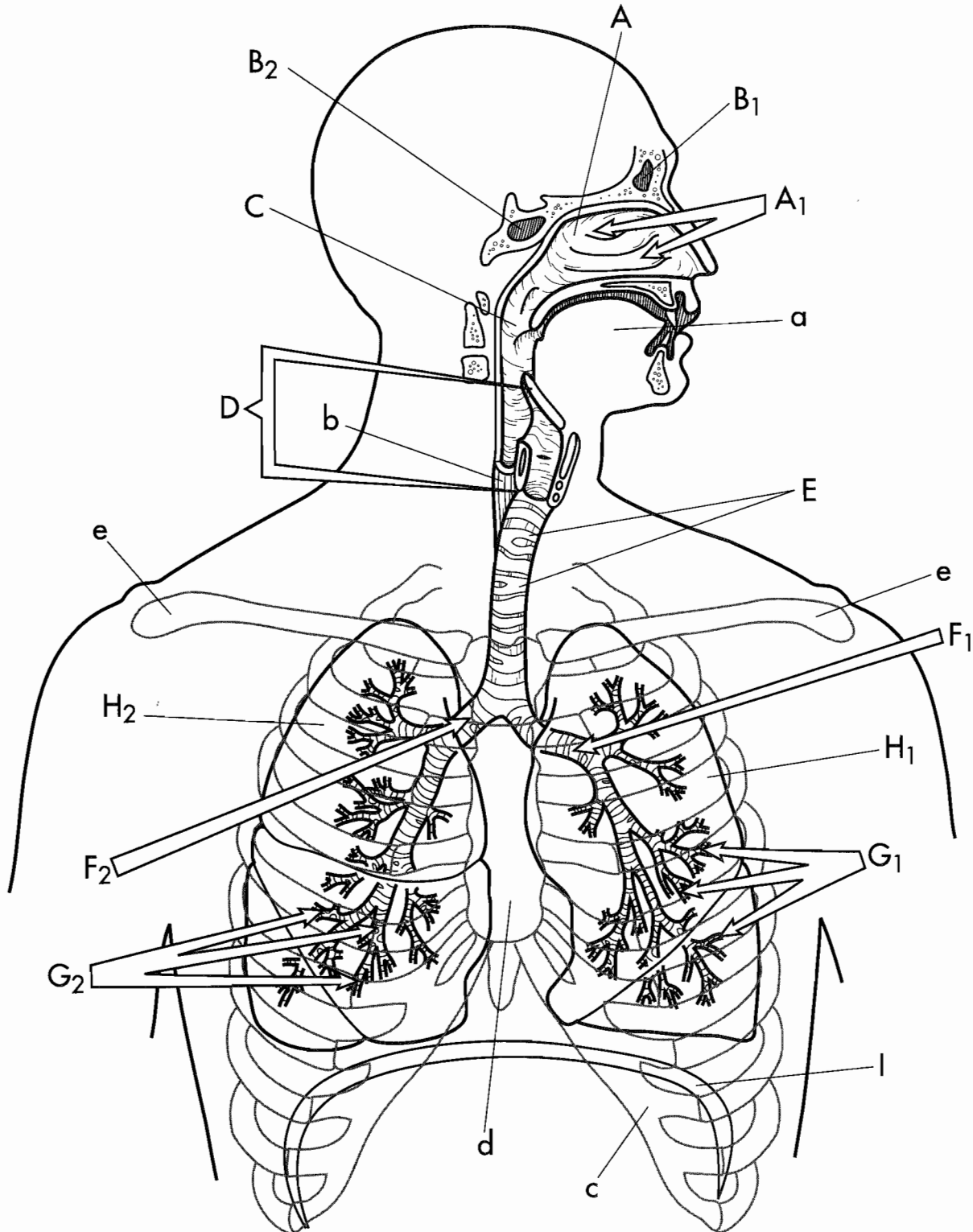
The Gallbladder

Liver	A	○
Left lobe	A_1	○
Right lobe	A_2	○
Caudate lobe	A_3	○
Quadrate lobe	A_4	○
Falciform ligament	B	○
Round ligament	C	○

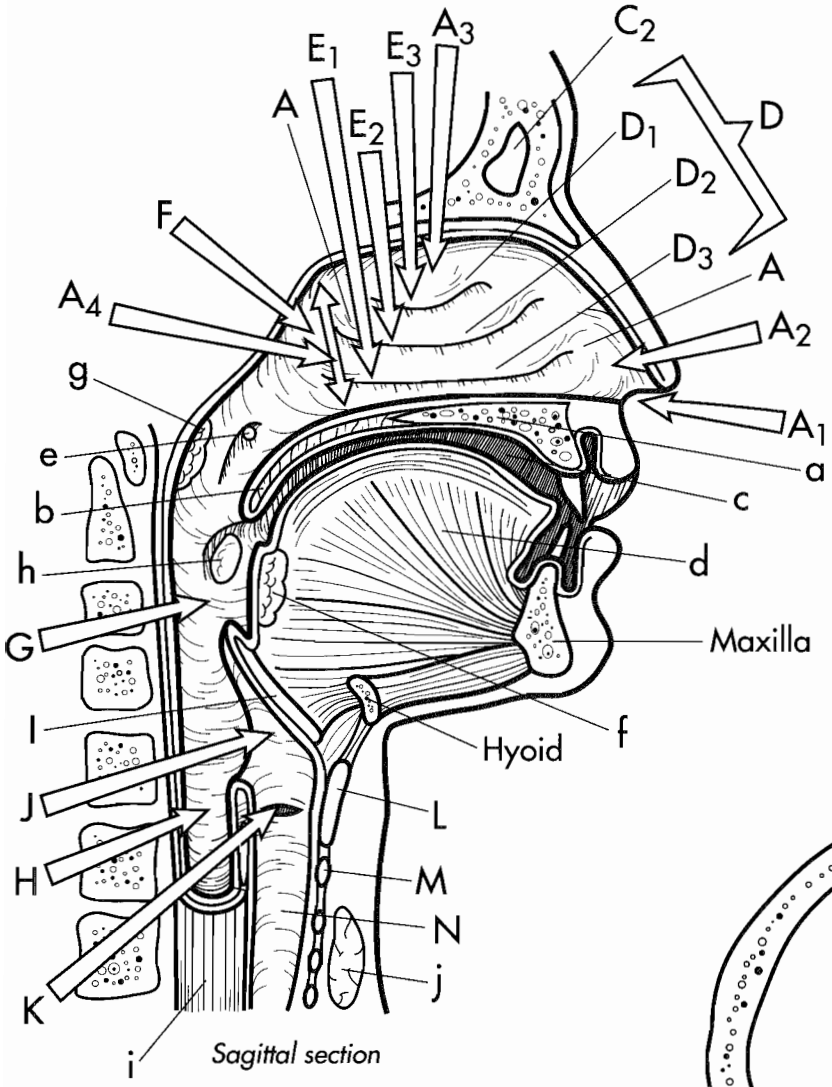
Coronary ligament	D	○
Gallbladder	E	○
Porta hepatis	F	○
Common bile duct	G	○
Cystic duct	H	○
Hepatic duct	I	○
Sphincter	J	○
Ampulla of Vater	K	○
Diaphragm	a	○
Stomach	b	○
Inferior vena cava	c	○
Hepatic portal vein	d	○
Hepatic artery	e	○
Capillary network	f	○
Hepatic vein	g	○
Pancreas	h	○
Pancreatic duct	i	○
Duodenum	j	○
Jejunum	k	○

CHAPTER TEN:

the RESPIRATORY SYSTEM

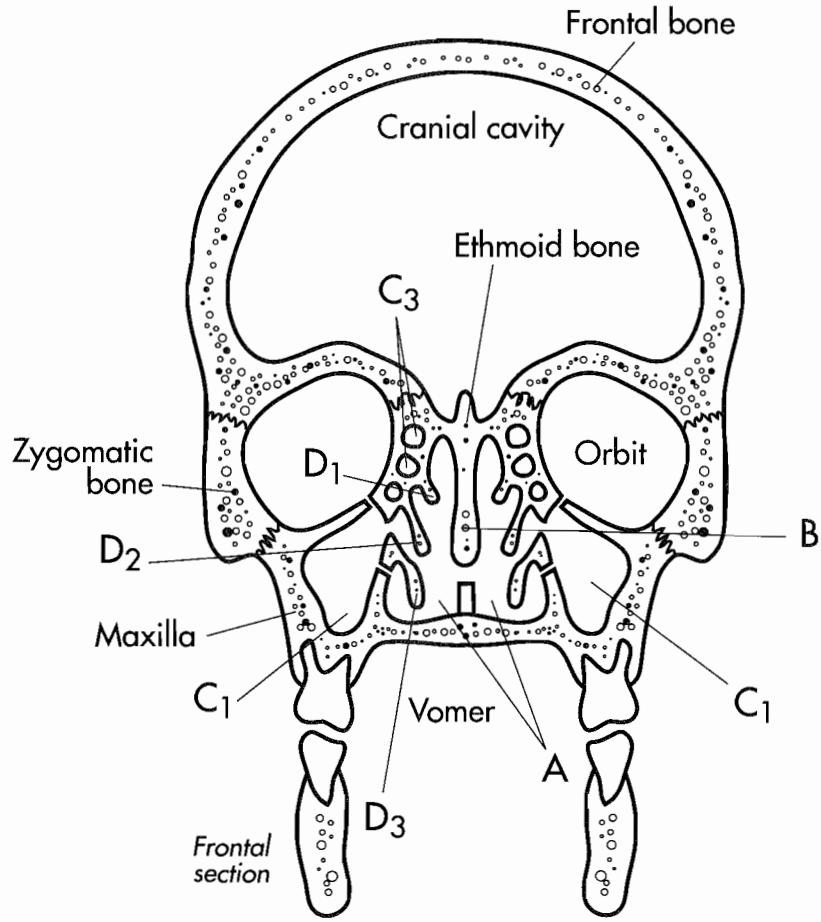


Nasal passage	A	○	Left mainstem bronchus	F_1	○	Diaphragm	I	○
Nasal conchae	A_1	○	Right mainstem bronchus	F_2	○	Tongue	a	○
Frontal sinus	B_1	○	Left bronchial tree	G_1	○	Esophagus	b	○
Sphenoid sinus	B_2	○	Right bronchial tree	G_2	○	Ribs	c	○
Pharynx	C	○	Left lung	H_1	○	Sternum	d	○
Larynx	D	○	Right lung	H_2	○	Clavicles	e	○
Trachea	E	○						



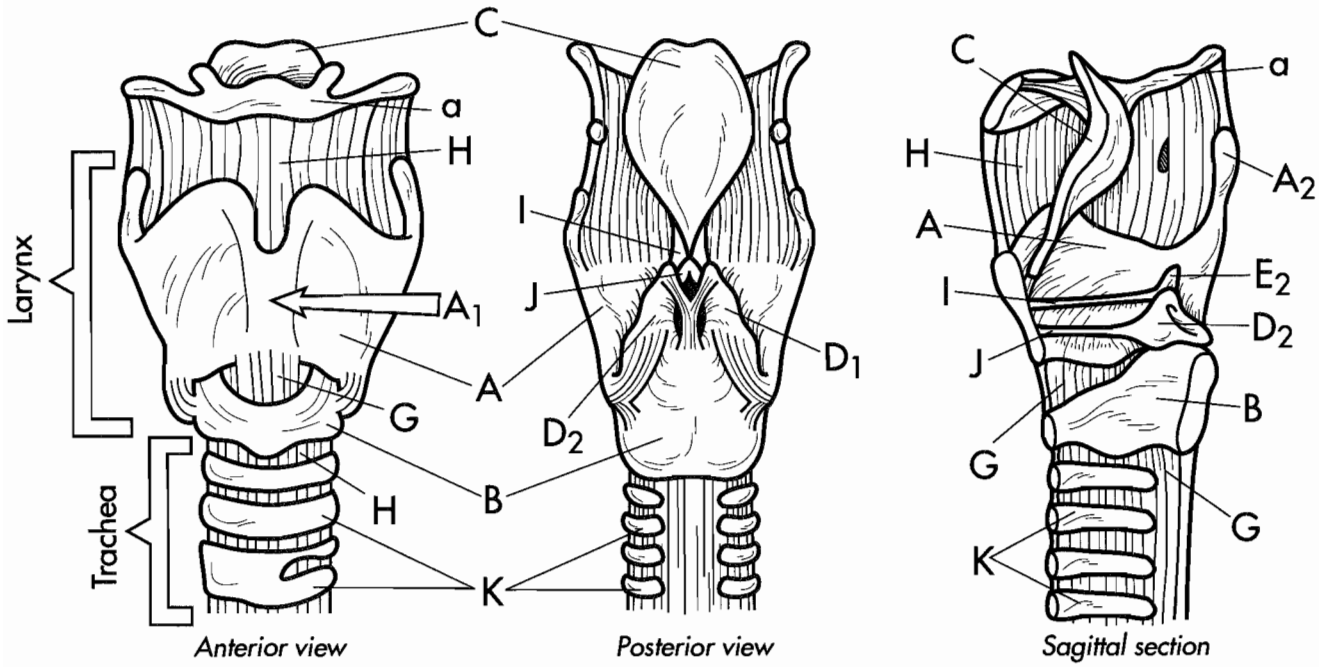
Sagittal section

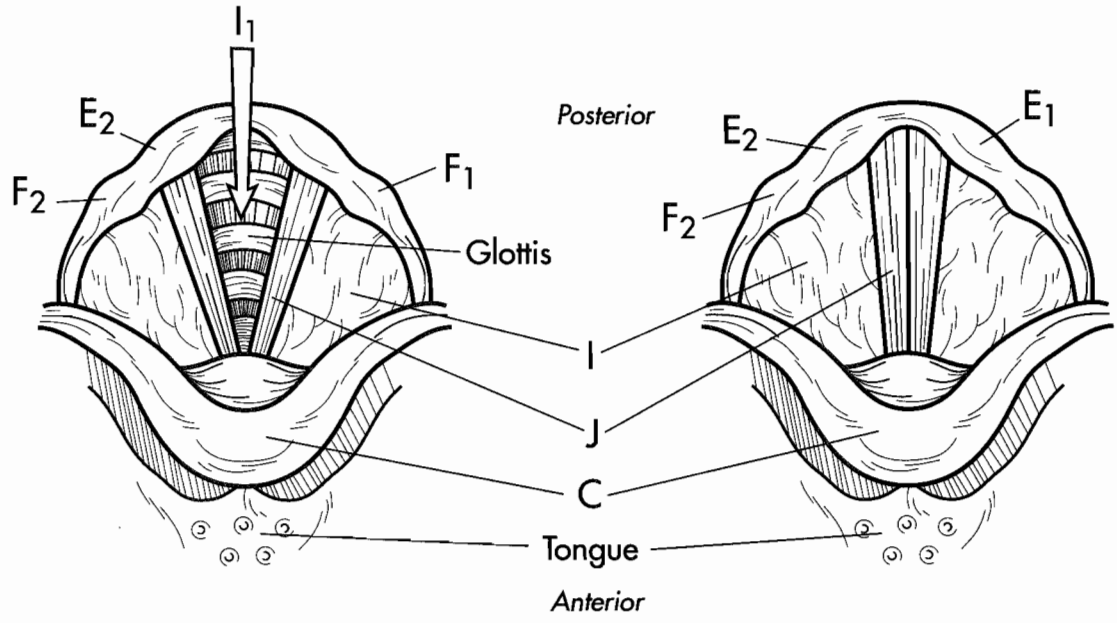
Nasal cavity	A	❍
External nares	A_1	❍
Vestibule	A_2	❍
Olfactory region	A_3	❍
Internal nares	A_4	❍
Nasal septum	B	❍
Maxillary sinus	C_1	❍
Frontal sinus	C_2	❍
Ethmoid sinus	C_3	❍
Nasal conchae	D	❍
Superior nasal concha	D_1	❍
Middle nasal concha	D_2	❍
Inferior nasal concha	D_3	❍
Superior nasal meatus	E_1	❍
Middle nasal meatus	E_2	❍
Inferior nasal meatus	E_3	❍
Nasopharynx	F	❍



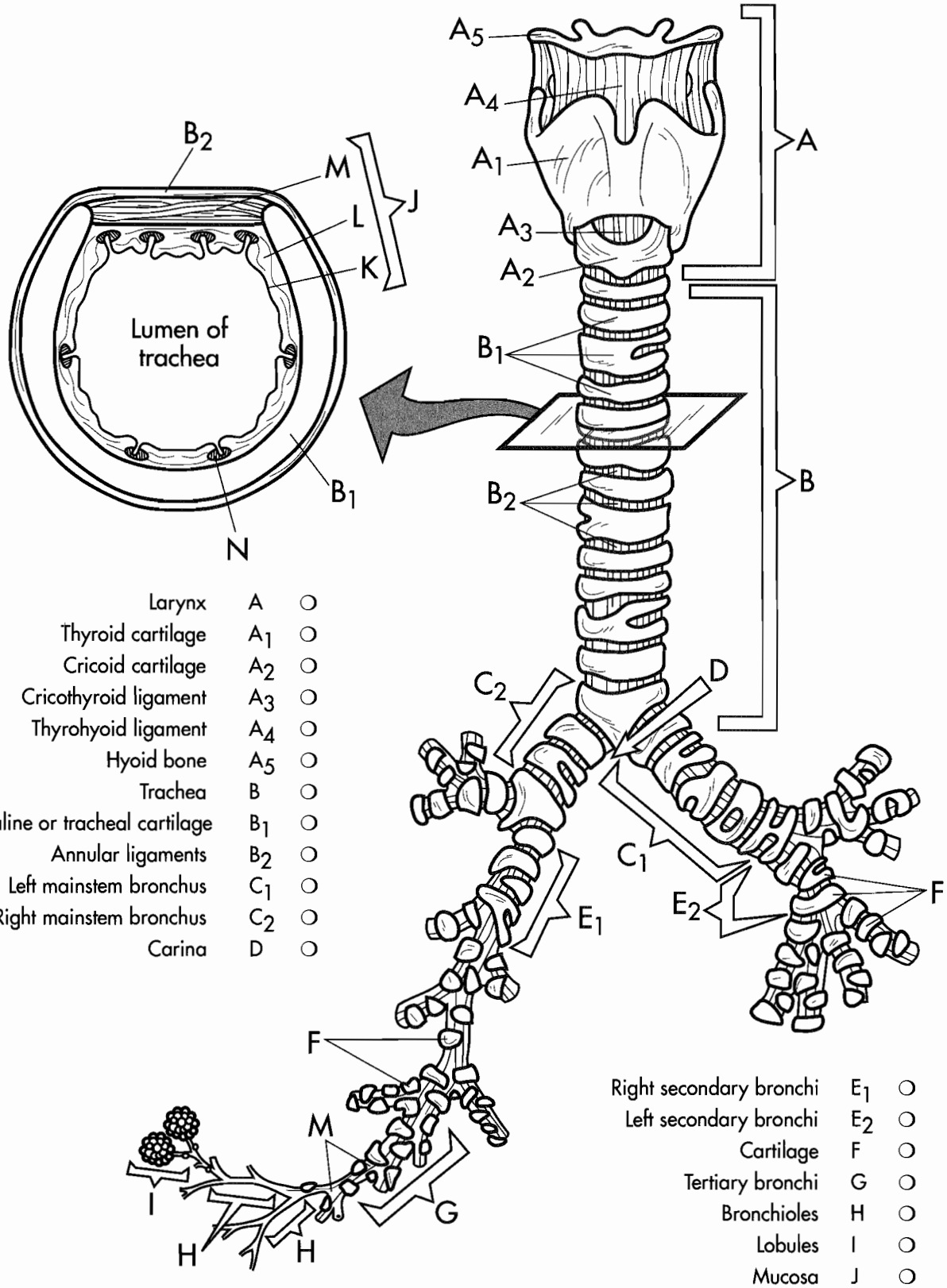
Frontal section

Oropharynx	G	❍
Laryngopharynx	H	❍
Epiglottis	I	❍
Glottis	J	❍
Vocal cords	K	❍
Thyroid cartilage	L	❍
Cricoid cartilage	M	❍
Trachea	N	❍
Hard palate	a	❍
Soft palate	b	❍
Oral cavity	c	❍
Tongue	d	❍
Eustachian tube	e	❍
Lingual tonsil	f	❍
Palatine tonsil	g	❍
Pharyngeal tonsil	h	❍
Esophagus	i	❍
Thyroid gland	j	❍



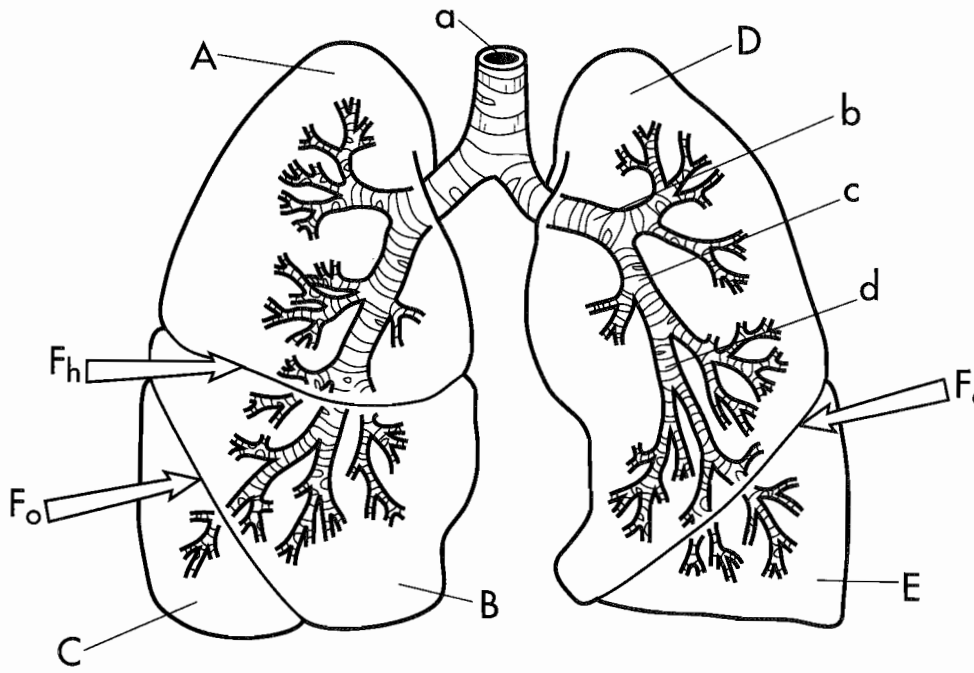


Thyroid cartilage	A	○	Right arytenoid cartilage	D_2	○	Extrinsic ligaments	H	○
Laryngeal prominence	A_1	○	Left corniculate cartilage	E_1	○	Ventricular folds	I	○
Thyroid cartilage	A_2	○	Right corniculate cartilage	E_2	○	Rima vestibuli	I_1	○
Cricoid cartilage	B	○	Left cuneiform cartilage	F_1	○	Vocal folds	J	○
Epiglottis	C	○	Right cuneiform cartilage	F_2	○	Rings of cartilage	K	○
Left arytenoid cartilage	D_1	○	Intrinsic ligaments	G	○	Hyoid bone	a	○



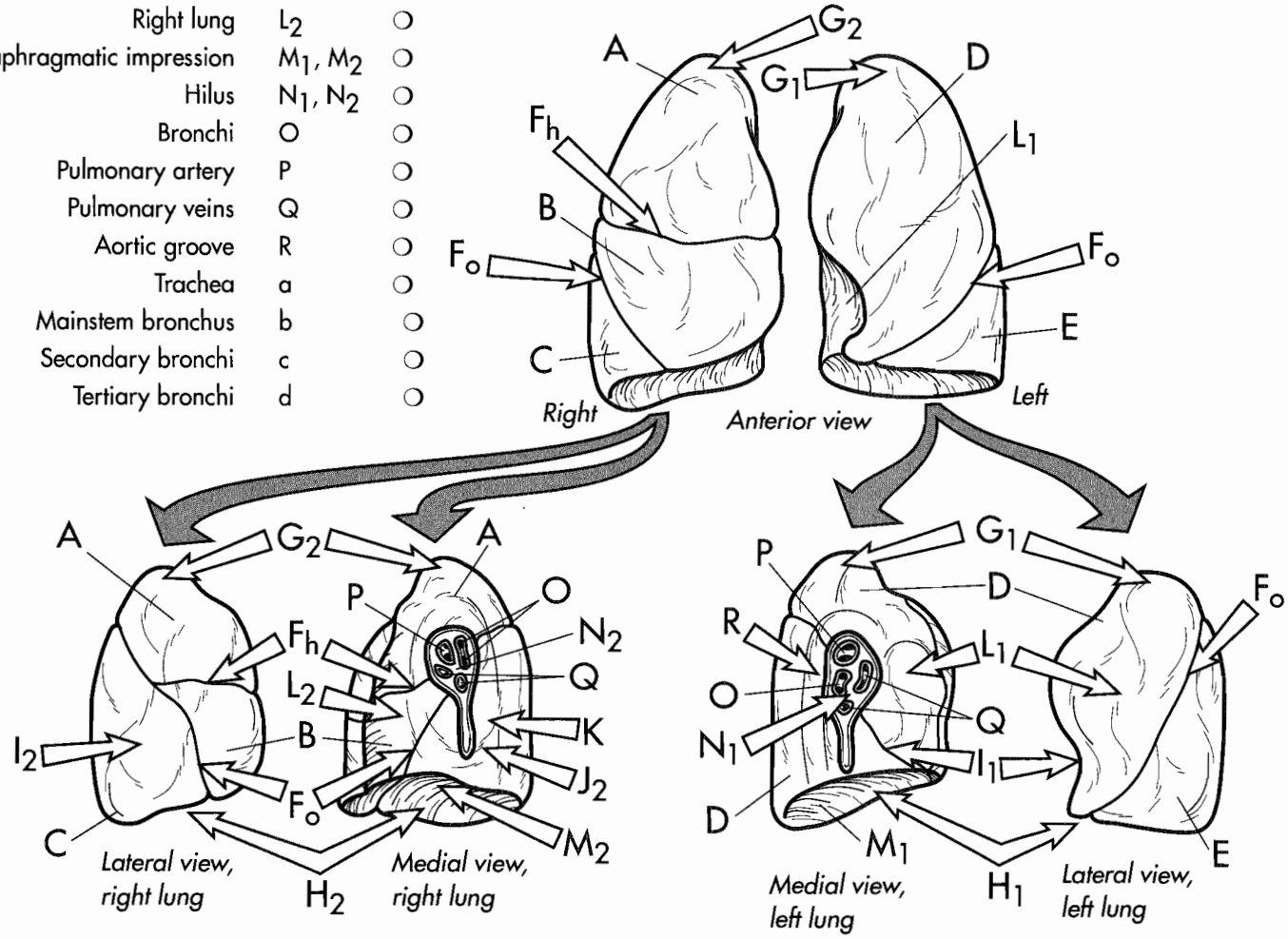
Larynx	A	○
Thyroid cartilage	A_1	○
Cricoid cartilage	A_2	○
Cricothyroid ligament	A_3	○
Thyrohyoid ligament	A_4	○
Hyoid bone	A_5	○
Trachea	B	○
Hyaline or tracheal cartilage	B_1	○
Annular ligaments	B_2	○
Left mainstem bronchus	C_1	○
Right mainstem bronchus	C_2	○
Carina	D	○

Right secondary bronchi	E_1	○
Left secondary bronchi	E_2	○
Cartilage	F	○
Tertiary bronchi	G	○
Bronchioles	H	○
Lobules	I	○
Mucosa	J	○
Ciliated epithelium	K	○
Lamina propria	L	○
Smooth muscle	M	○
Mucous cells	N	○



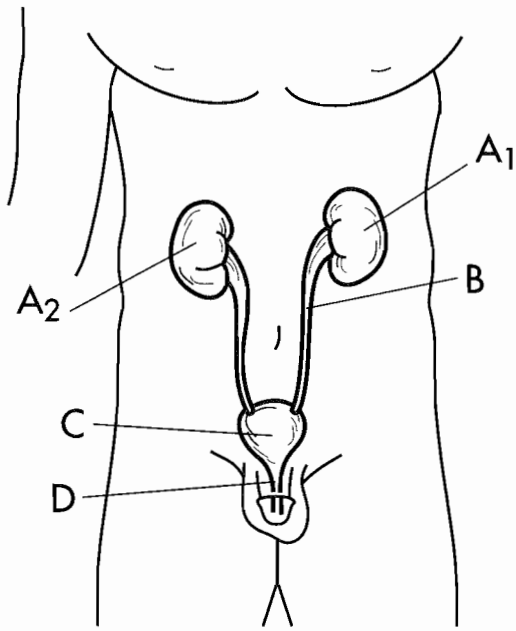
Right superior lobe	A	○
Right middle lobe	B	○
Right inferior lobe	C	○
Left superior lobe	D	○
Left inferior lobe	E	○
Horizontal fissure	F_h	○
Oblique fissure	F_o	○
Cupula (Apex)	G_1, G_2	○
Base	H_1, H_2	○
Left costal surface	I_1	○
Right costal surface	I_2	○
Mediastinal surface	J_1, J_2	○
Esophageal groove	K	○
Cardiac impression	L_1	○

Right lung	L_2	○
Diaphragmatic impression	M_1, M_2	○
Hilus	N_1, N_2	○
Bronchi	O	○
Pulmonary artery	P	○
Pulmonary veins	Q	○
Aortic groove	R	○
Trachea	a	○
Mainstem bronchus	b	○
Secondary bronchi	c	○
Tertiary bronchi	d	○

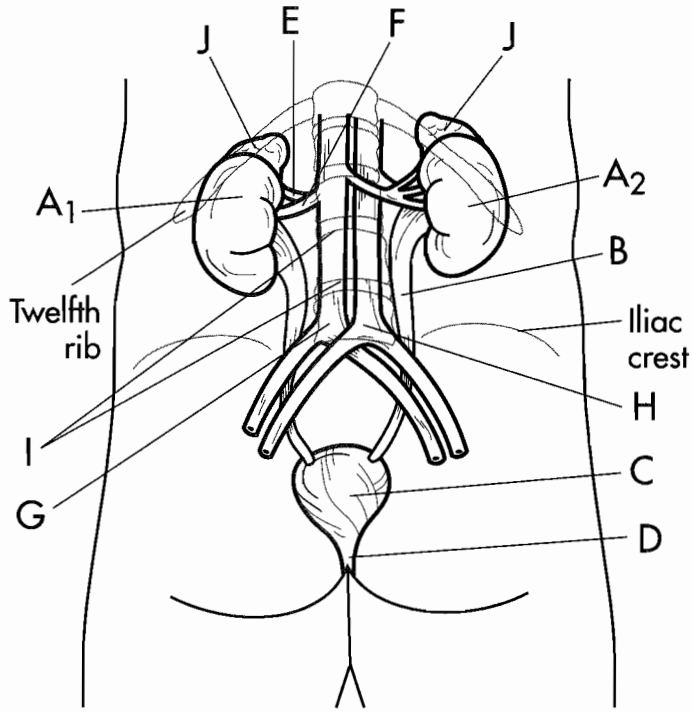


CHAPTER ELEVEN:

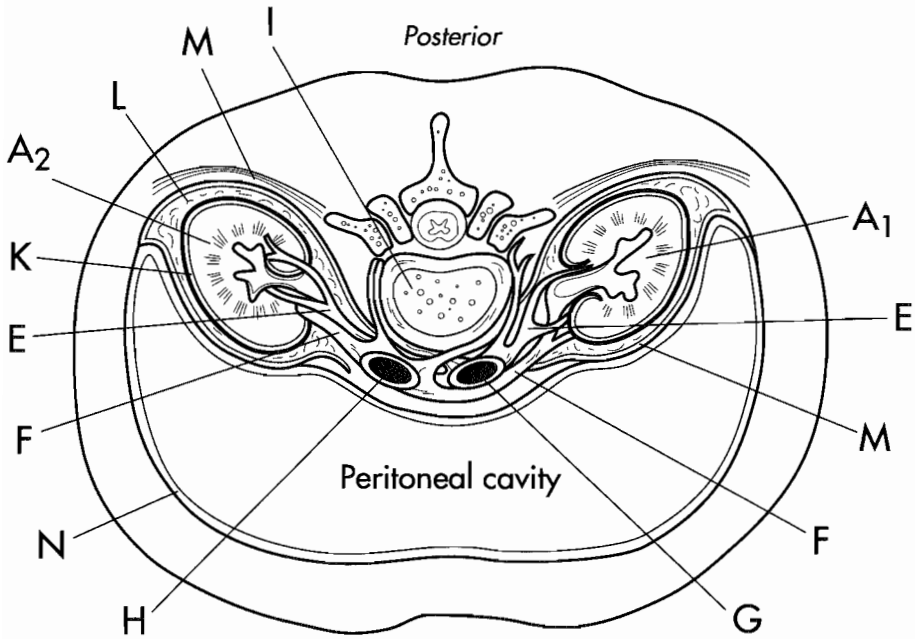
the URINARY SYSTEM



Anterior view



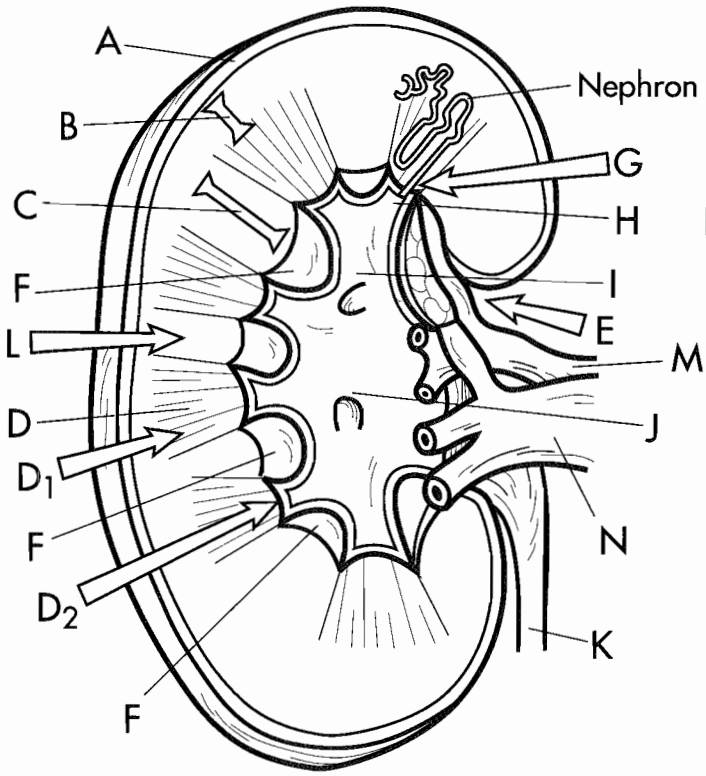
Posterior view



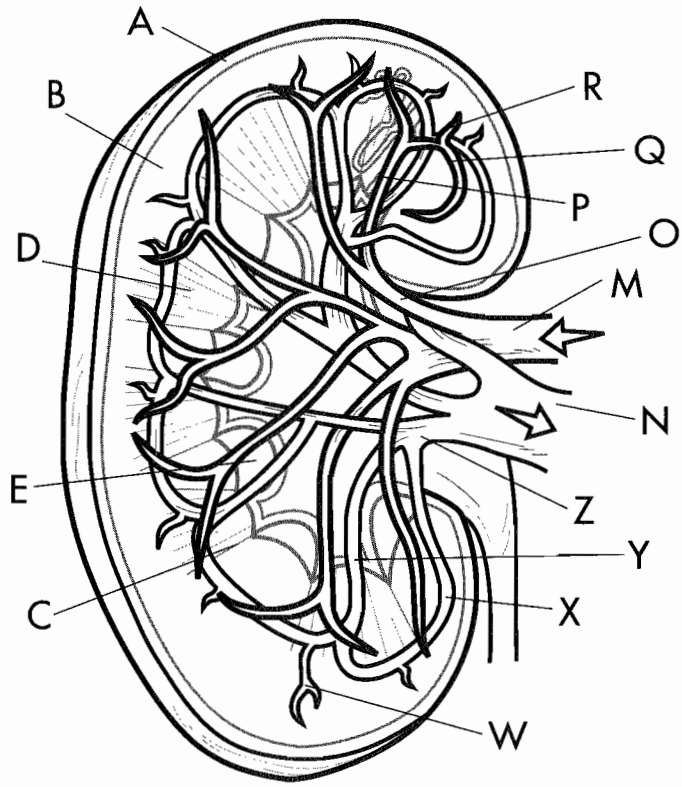
Anterior

Inferior view of transverse section

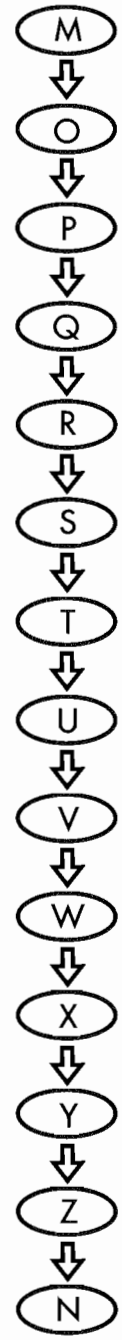
Left kidney	A_1	○
Right kidney	A_2	○
Ureter	B	○
Urinary bladder	C	○
Urethra	D	○
Renal artery	E	○
Renal vein	F	○
Abdominal aorta	G	○
Inferior vena cava	H	○
Lumbar vertebra	I	○
Suprarenal glands	J	○
Renal capsule	K	○
Adipose capsule	L	○
Renal fascia	M	○
Peritoneum	N	○



Frontal section of right kidney

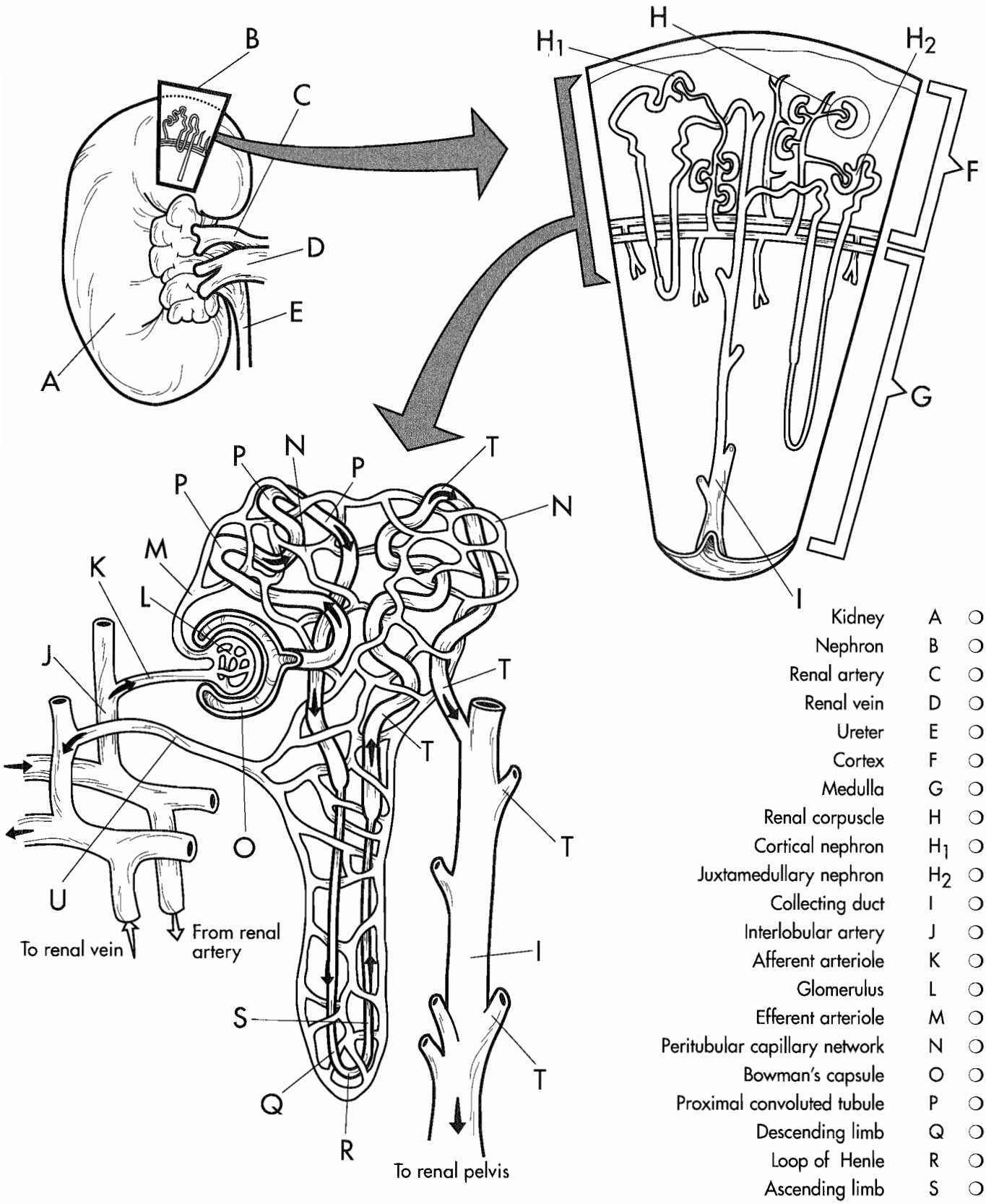


Blood Flowchart

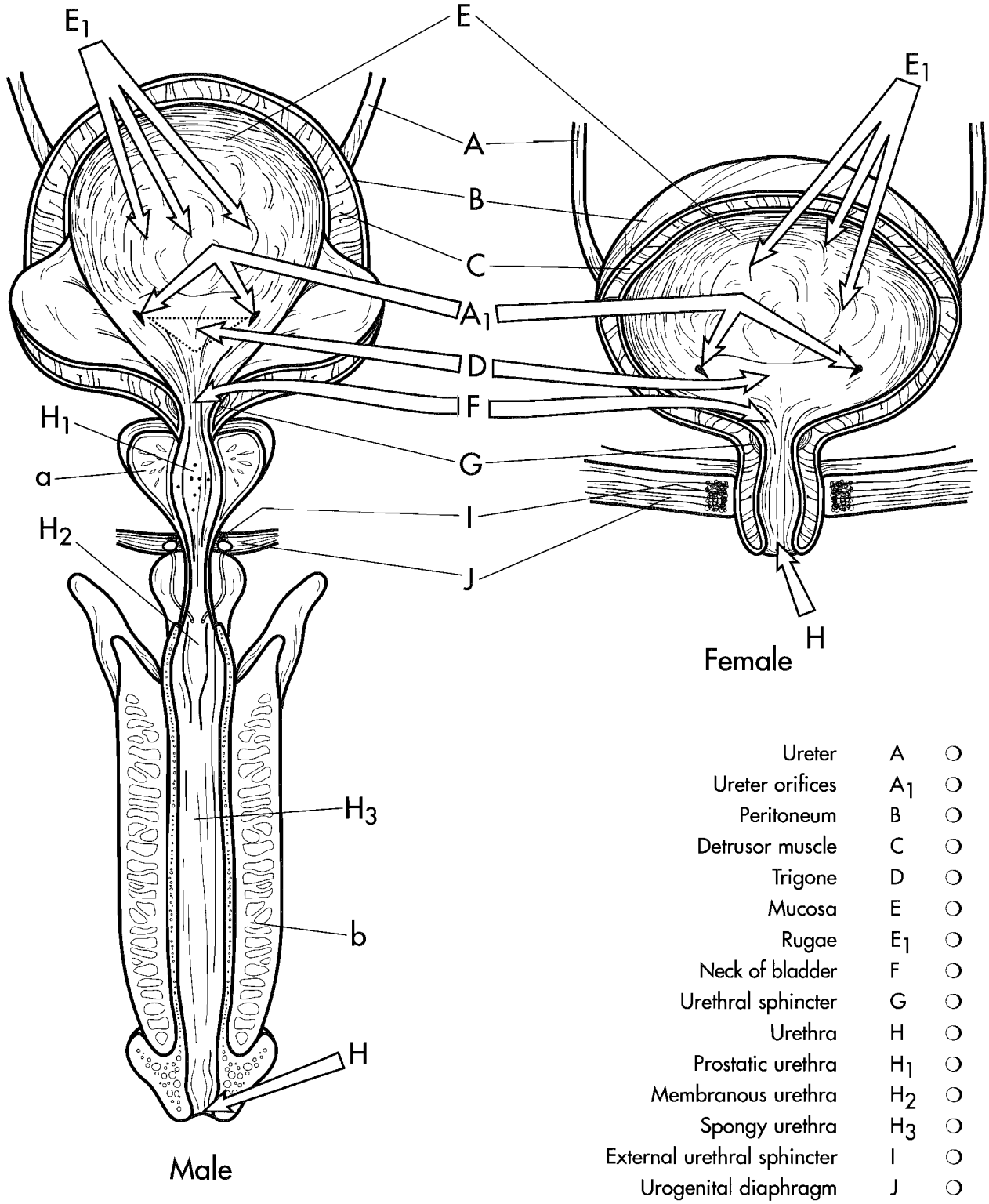


Capsule	A	○
Renal cortex	B	○
Renal medulla	C	○
Renal pyramids	D	○
Base	D_1	○
Apex (renal papilla)	D_2	○
Hilus	E	○
Renal sinus	F	○
Papillary duct	G	○
Minor calyx	H	○
Major calyces	I	○
Renal pelvis	J	○
Ureter	K	○
Renal columns	L	○
Renal artery	M	○
Renal vein	N	○
Segmental arteries	O	○
Interlobar artery	P	○
Arcuate arteries	Q	○
Interlobular arteries	R	○
Afferent arteries	S	○
Glomerulus	T	○
Efferent arteriole	U	○
Peritubular capillary	V	○
Interlobular vein	W	○
Arcuate vein	X	○
Interlobar veins	Y	○
Segmental veins	Z	○

THE NEPHRON



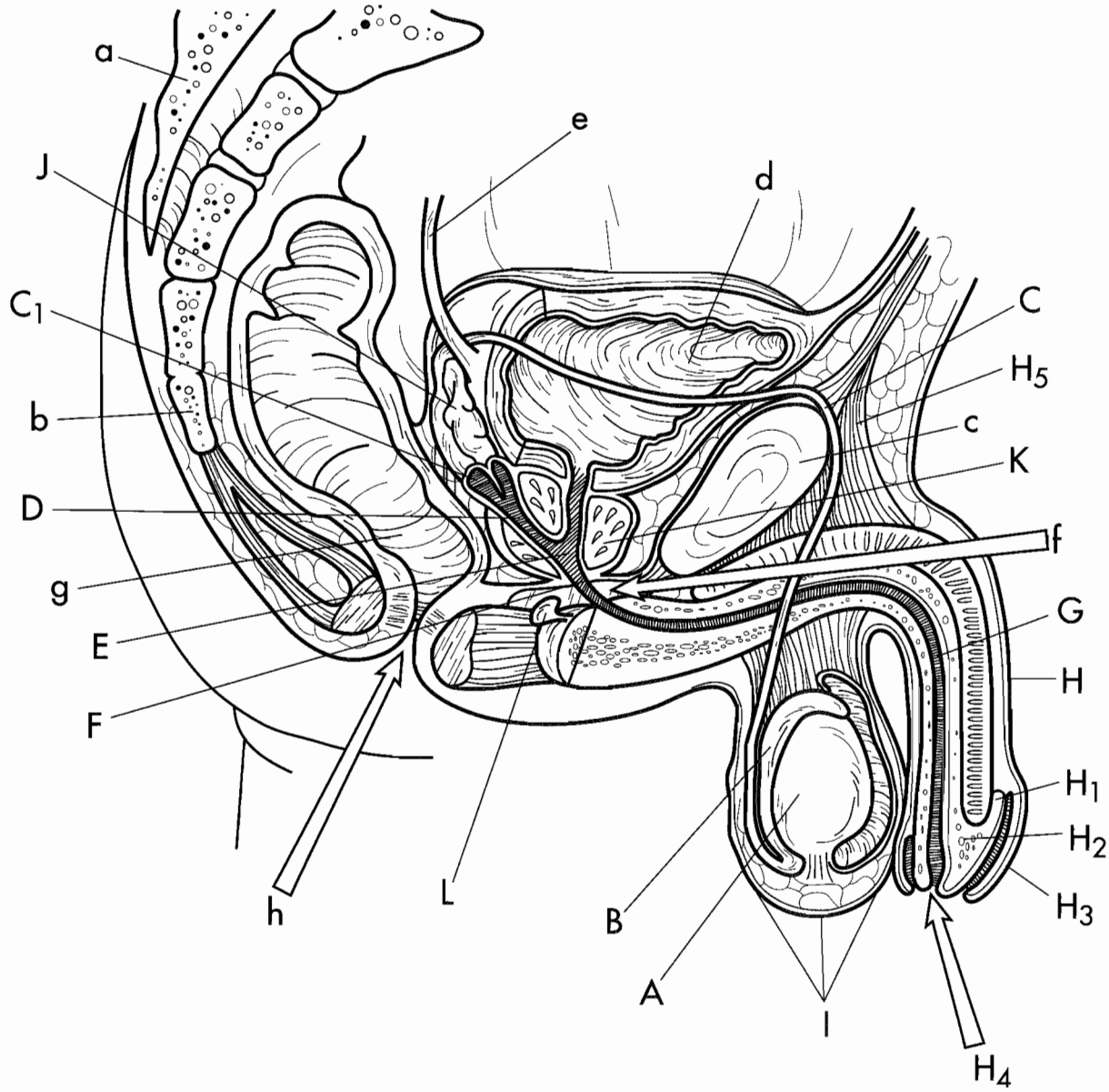
Kidney	A	○
Nephron	B	○
Renal artery	C	○
Renal vein	D	○
Ureter	E	○
Cortex	F	○
Medulla	G	○
Renal corpuscle	H	○
Cortical nephron	H_1	○
Juxtamedullary nephron	H_2	○
Collecting duct	I	○
Interlobular artery	J	○
Afferent arteriole	K	○
Glomerulus	L	○
Efferent arteriole	M	○
Peritubular capillary network	N	○
Bowman's capsule	O	○
Proximal convoluted tubule	P	○
Descending limb	Q	○
Loop of Henle	R	○
Ascending limb	S	○
Distal convoluted tubule	T	○
Interlobular vein	U	○



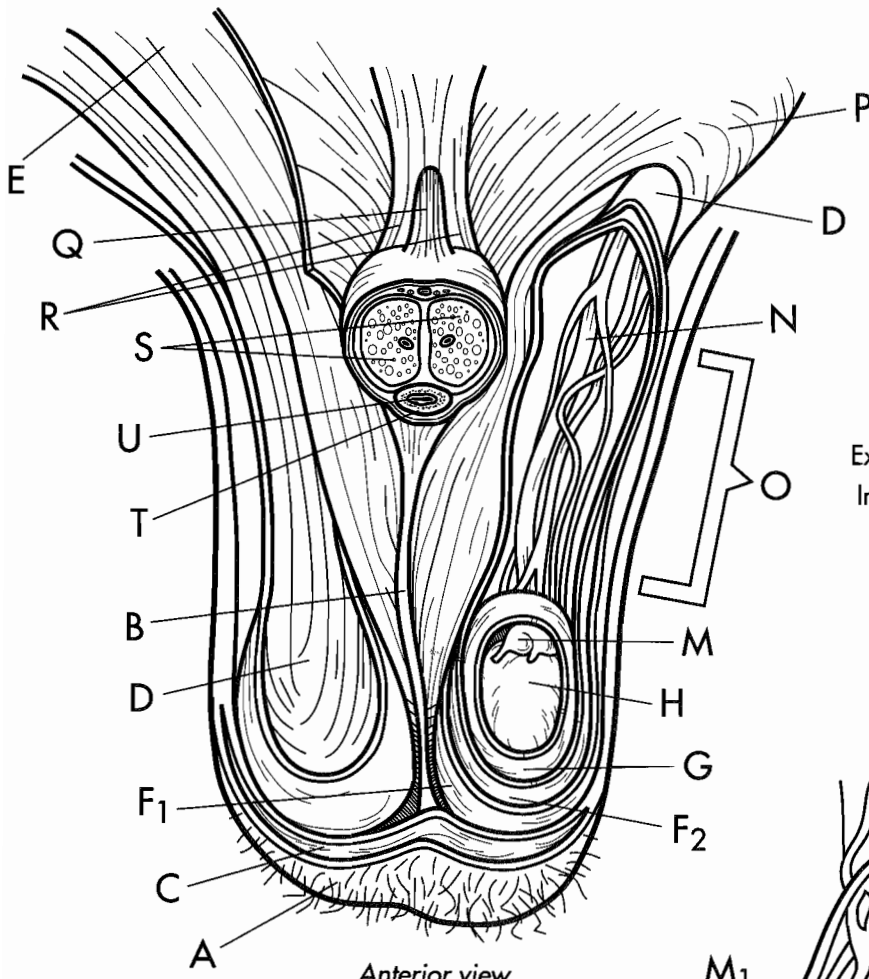
Ureter	A	○
Ureter orifices	A_1	○
Peritoneum	B	○
Detrusor muscle	C	○
Trigone	D	○
Mucosa	E	○
Rugae	E_1	○
Neck of bladder	F	○
Urethral sphincter	G	○
Urethra	H	○
Prostatic urethra	H_1	○
Membranous urethra	H_2	○
Spongy urethra	H_3	○
External urethral sphincter	I	○
Urogenital diaphragm	J	○
Prostate gland	a	○
Penis	b	○

CHAPTER TWELVE:

the REPRODUCTIVE SYSTEM

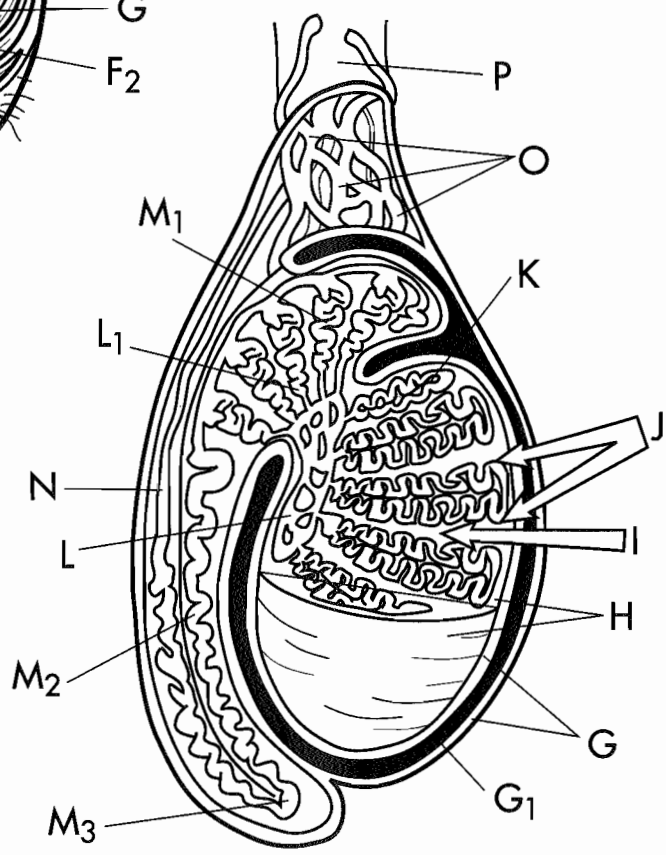


Testis	A	○	Glans penis	H_2	○	Coccyx	b	○
Epididymis	B	○	Prepuce	H_3	○	Pubic symphysis	c	○
Ductus deferens	C	○	Orifice of urethra	H_4	○	Urinary bladder	d	○
Ampulla	C_1	○	Suspensory ligament	H_5	○	Ureter	e	○
Ejaculatory duct	D	○	Scrotum	I	○	Urogenital diaphragm	f	○
Prostatic urethra	E	○	Seminal vesicle	J	○	Rectum	g	○
Membranous urethra	F	○	Prostate gland	K	○	Anus	h	○
Spongy urethra	G	○	Bulbourethral gland	L	○			
Penis	H	○	Sacrum	a	○			
Corona	H_1	○						



Anterior view

Scrotum	A	○
Septum	B	○
Dartos	C	○
Cremaster muscle	D	○
Internal oblique muscle	E	○
Fascia	F	○
External spermatic fascia	F_1	○
Internal spermatic fascia	F_2	○
Tunica vaginalis	G	○
Cavity	G_1	○
Tunica albuginea	H	○
Septum	I	○
Lobules	J	○

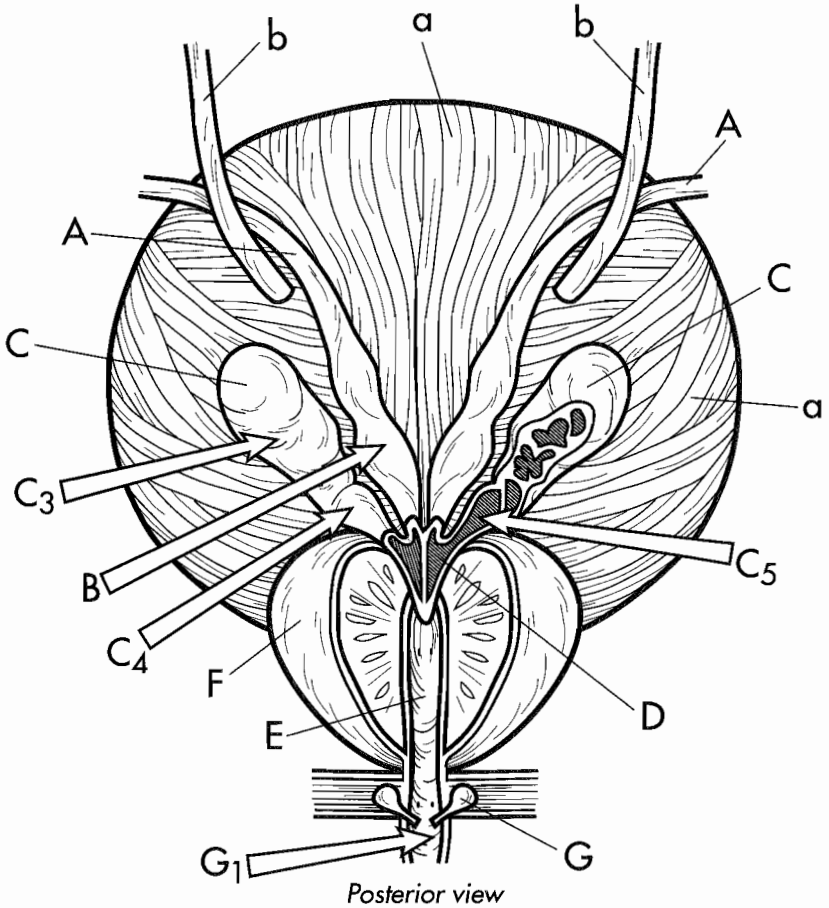


Sagittal section

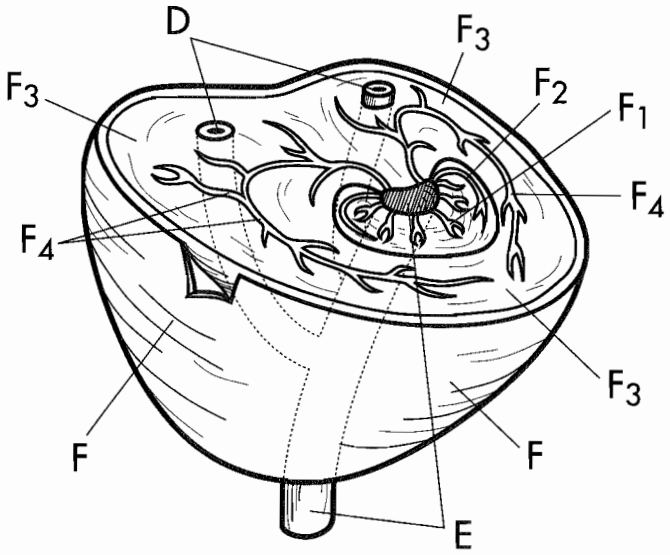
Seminiferous tubules	K	○
Rete testis	L	○
Efferent ductules	L_1	○
Epididymis	M	○
Head	M_1	○
Body	M_2	○
Tail	M_3	○
Ductus deferens	N	○
Blood vessels, nerves	O	○
Spermatic cord	P	○
Suspensory ligament	Q	○
Fundiform ligament	R	○
Corpora cavernosa	S	○
Corpus spongiosum	T	○
Spongy urethra	U	○

MALE ACCESSORY GLANDS

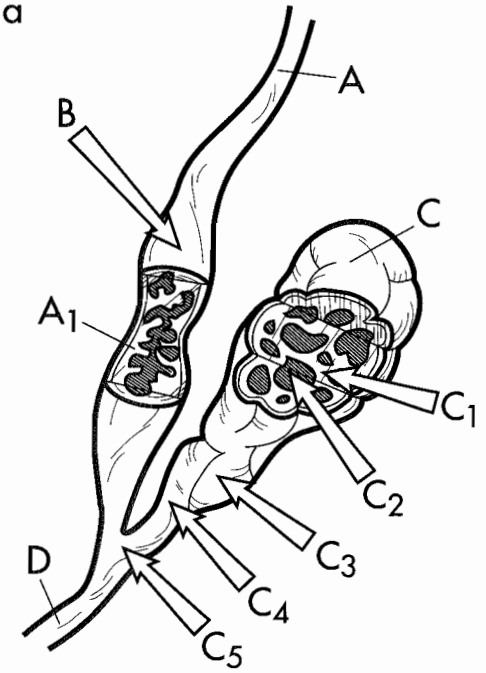
Ductus deferens	A	○
Smooth muscle	A_1	○
Ampulla	B	○
Seminal vesicle	C	○
Glandular folds	C_1	○
Outpockets	C_2	○
Body	C_3	○
Base	C_4	○
Vesicle duct	C_5	○
Ejaculatory ducts	D	○



Posterior view

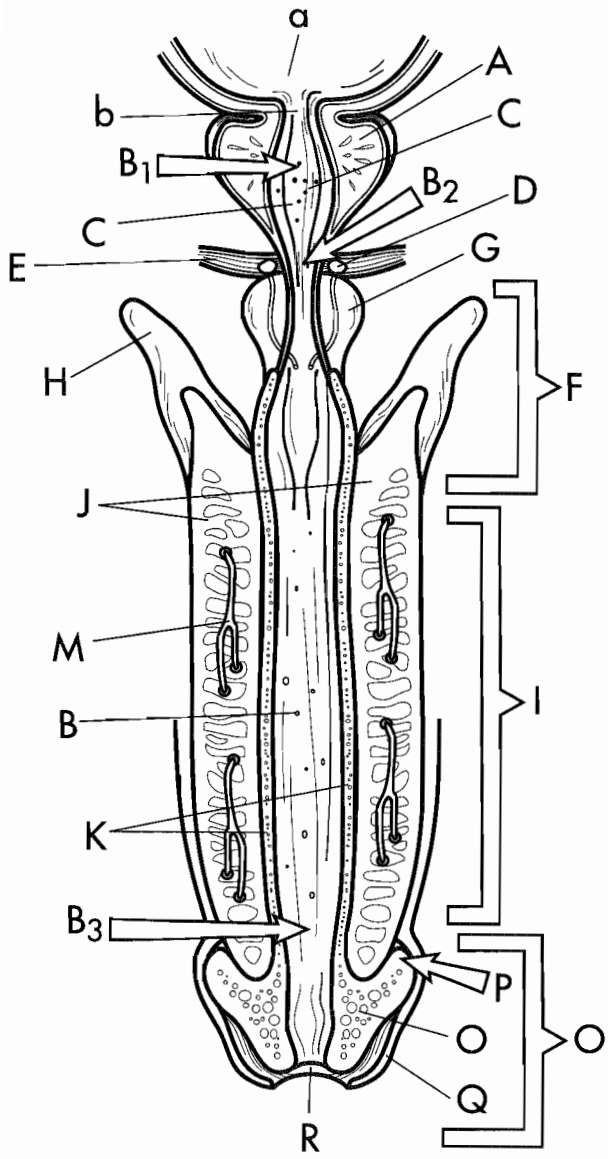


Cross section of prostate gland



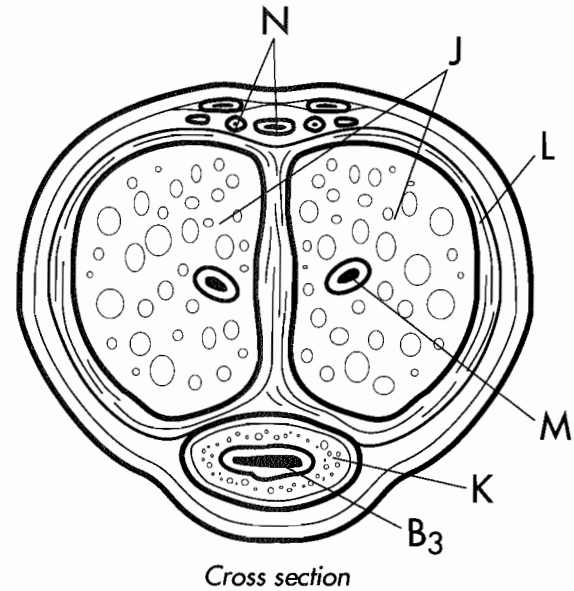
Seminal Vesicle

Urethra	E	○
Prostate gland	F	○
Mucosal glands	F_1	○
Submucosal glands	F_2	○
Main prostatic glands	F_3	○
Submucosal ducts	F_4	○
Bulbourethral gland	G	○
Duct	G_1	○
Urinary bladder	a	○
Ureters	b	○



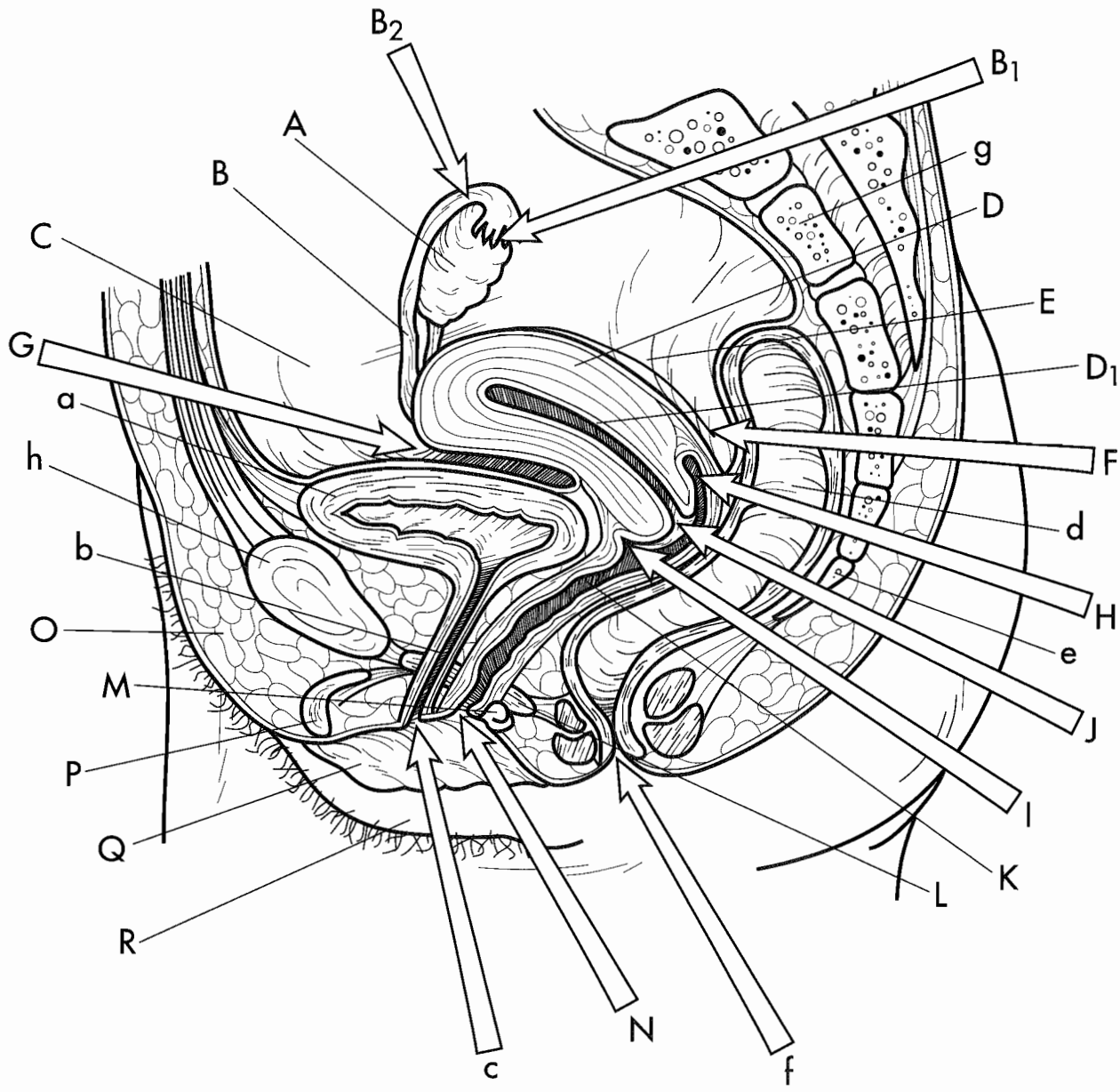
Frontal section

Prostate gland	A	○
Urethra	B	○
Prostatic urethra	B_1	○
Membranous urethra	B_2	○
Spongy urethra	B_3	○
Ejaculatory duct	C	○
Bulbourethral gland	D	○
Urogenital diaphragm	E	○
Root of penis	F	○
Bulb	G	○
Crus	H	○
Shaft	I	○
Corpora cavernosa	J	○
Corpus spongiosum	K	○
Tunica albuginea	L	○

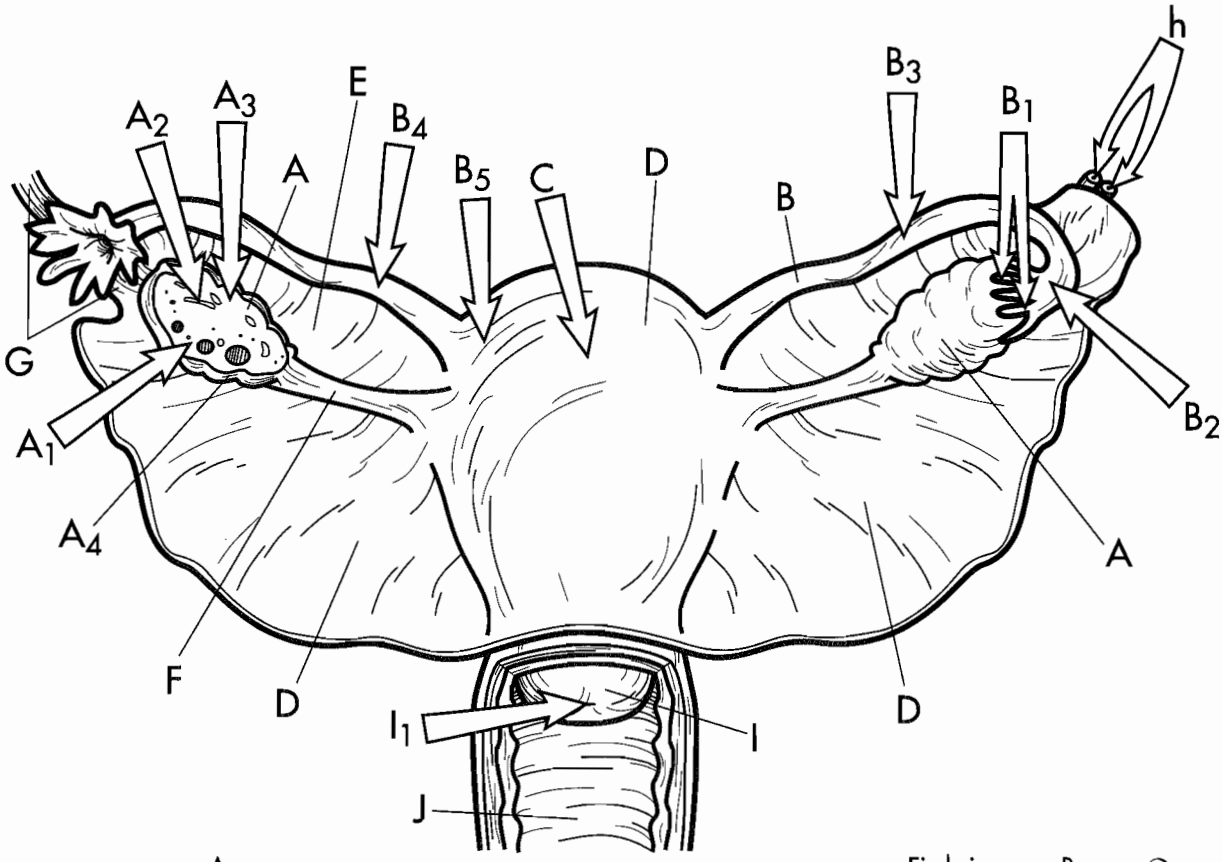


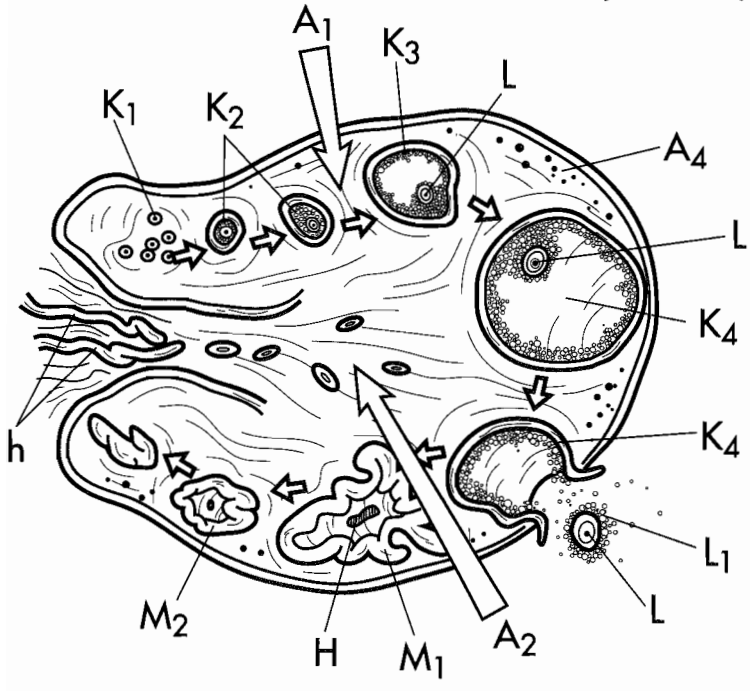
Cross section

Blood vessels	M	○
Smaller blood vessels	N	○
Glans penis	O	○
Corona	P	○
Prepuce	Q	○
External urethral orifice	R	○
Urinary bladder	a	○
Internal urethral orifice	b	○



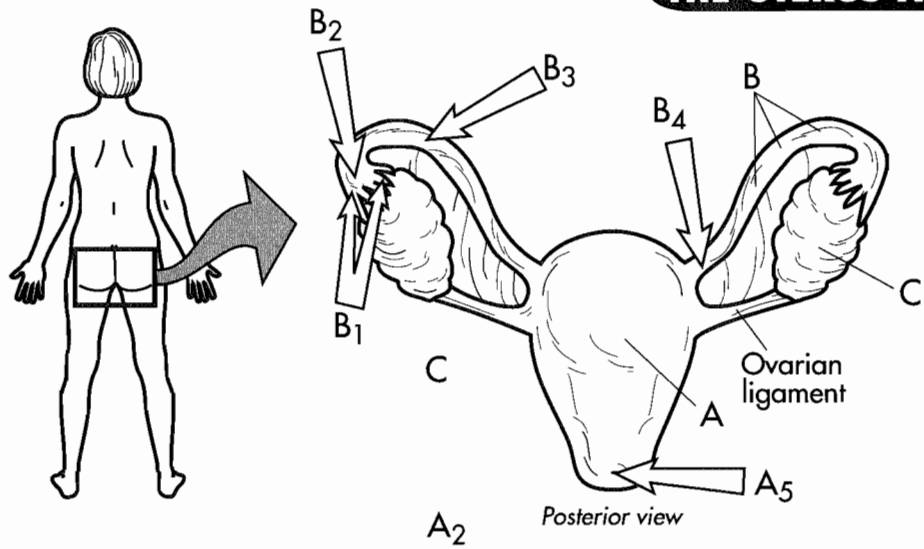
Ovaries	A	○	Posterior fornix	H	○	Urinary bladder	a	○
Uterine tubes	B	○	Anterior fornix	I	○	Urethra	b	○
Fimbria	B_1	○	Cervix	J	○	External urethral meatus	c	○
Infundibulum	B_2	○	Vagina	K	○	Rectum	d	○
Round ligament	C	○	Urogenital diaphragm	L	○	Coccyx	e	○
Uterus	D	○	Greater vestibular gland	M	○	Anus	f	○
Endometrium	D_1	○	Vaginal orifice	N	○	Sacrum	g	○
Uterosacral ligament	E	○	Mons pubis	O	○	Pubic symphysis	h	○
Rectouterine pouch	F	○	Clitoris	P	○			
Vesicouterine pouch	G	○	Labium minora	Q	○			
			Labium majora	R	○			



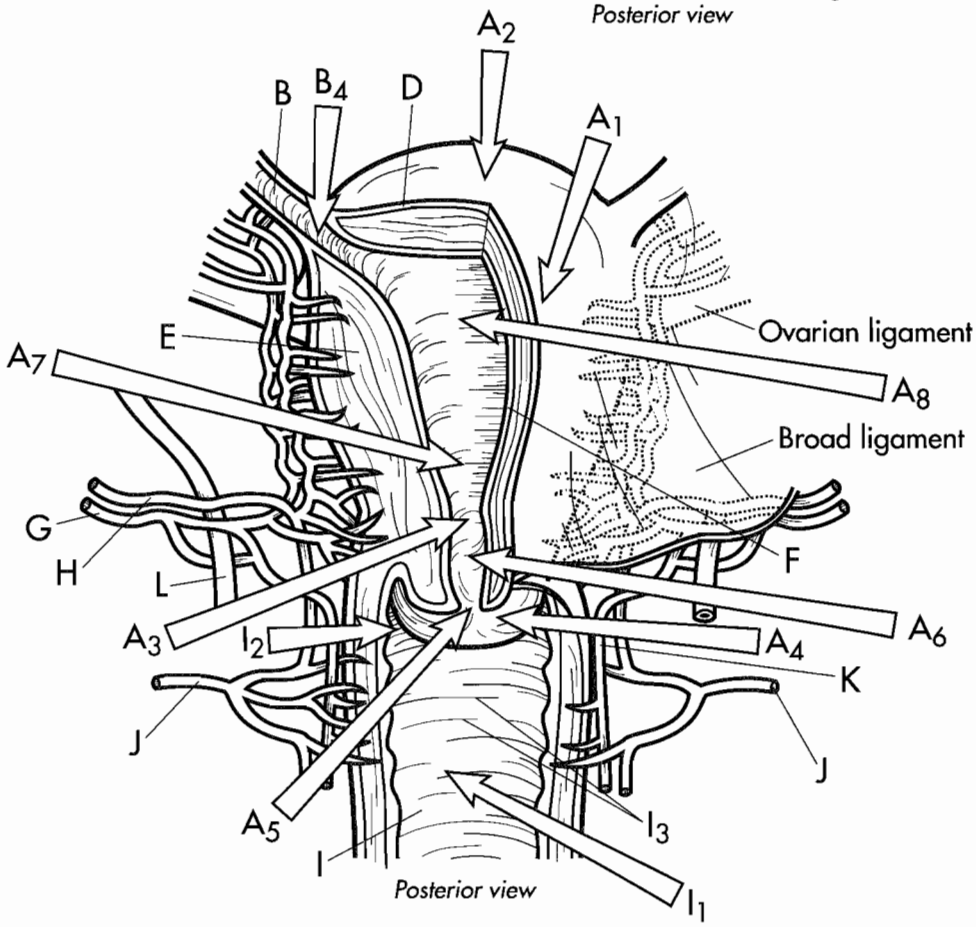


Ovary	A	○
Cortex	A_1	○
Vascular medulla	A_2	○
Ovarian hilum	A_3	○
Tunica albuginea	A_4	○
Fallopian tube	B	○

Fimbriae	B_1	○
Infundibulum	B_2	○
Ampulla	B_3	○
Isthmus	B_4	○
Intramural part of uterine tube	B_5	○
Uterus	C	○
Broad ligament	D	○
Mesovarium	E	○
Ovarian ligament	F	○
Suspensory ligament	G	○
Corpus albicans	H	○
Cervix	I	○
Cervical os	I_1	○
Vagina	J	○
Primordial follicle	K_1	○
Cells	K_2	○
Secondary follicle	K_3	○
Mature follicle	K_4	○
Egg cell	L	○
Corona radiata	L_1	○
Early corpus luteum	M_1	○
Mature corpus luteum	M_2	○
Vein	h	○

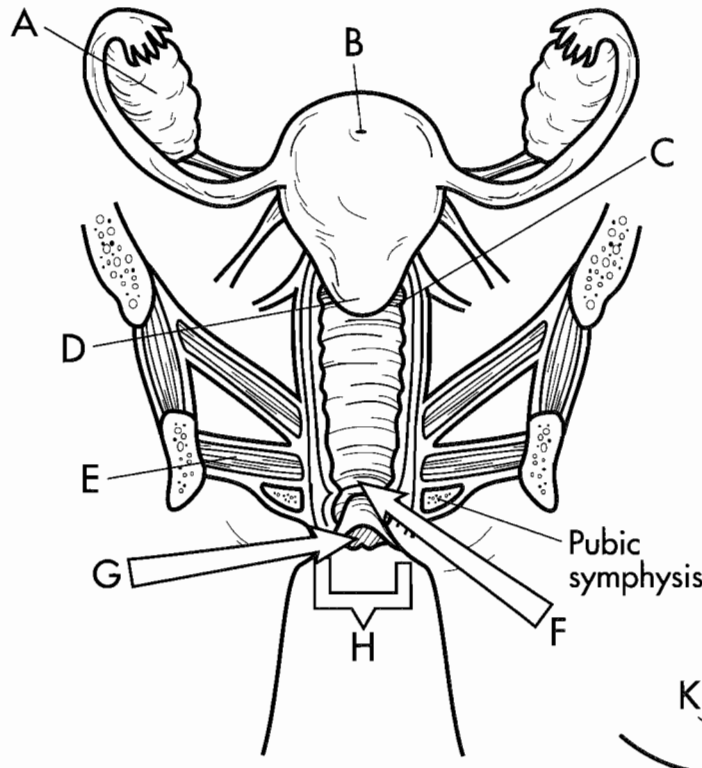


Posterior view

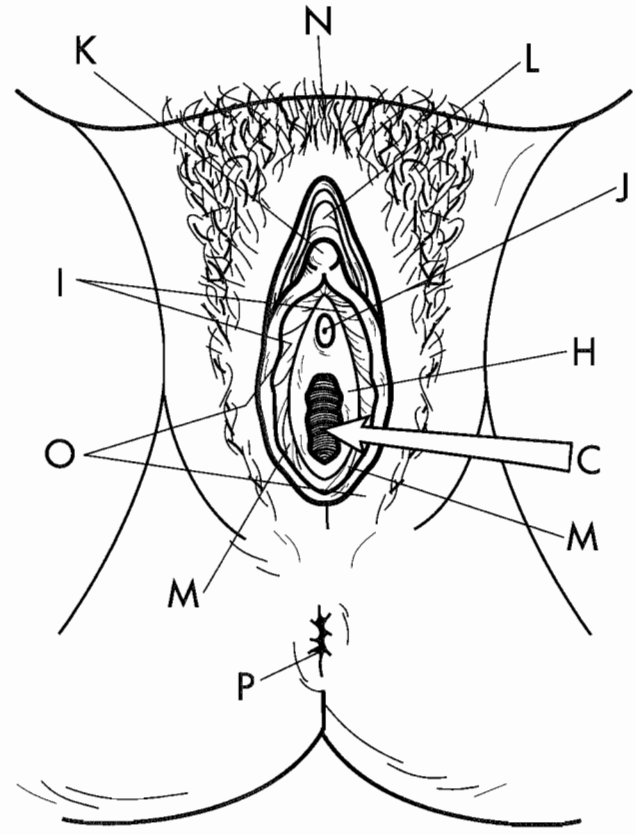


Posterior view

Uterus	A	❍	Fallopian tubes	B	❍	Uterine artery	G	❍
Body (corpus)	A_1	❍	Fimbriae	B_1	❍	Uterine vein	H	❍
Fundus	A_2	❍	Infundibulum	B_2	❍	Vagina	I	❍
Isthmus	A_3	❍	Ampulla	B_3	❍	Vaginal canal	I_1	❍
Cervix	A_4	❍	Intramural portion	B_4	❍	Fornix	I_2	❍
Cervical os	A_5	❍	Ovaries	C	❍	Rugae	I_3	❍
Cervical canal	A_6	❍	Perimetrium (serosa)	D	❍	Vaginal artery	J	❍
Internal os	A_7	❍	Myometrium	E	❍	Vaginal vein	K	❍
Uterine cavity	A_8	❍	Endometrium	F	❍	Ureter	L	❍



Ovary	A	❍
Uterus	B	❍
Vagina	C	❍
Cervical os	D	❍
Urogenital diaphragm	E	❍
Hymen	F	❍
External genitalia	G	❍
Vestibule	H	❍
Labia minora	I	❍



Urethra	J	❍
Clitoris	K	❍
Prepuce	L	❍
Greater vestibular (Bartholin's) glands	M	❍
Mons pubis	N	❍
Labia majora	O	❍
Anus	P	❍

Pectoralis major muscle	A	○
Lymph vessels and lymph nodes	B	○
Deep fascia	C_1	○
Superficial fascia	C_2	○
Nipple	D	○
Areola	E	○
Cooper's ligaments	F	○
Lobes	G	○
Lobules of mammary gland	H	○
Secondary tubules	I	○
Mammary ducts	J	○
Lactiferous sinus	K	○
Lactiferous duct	L	○