



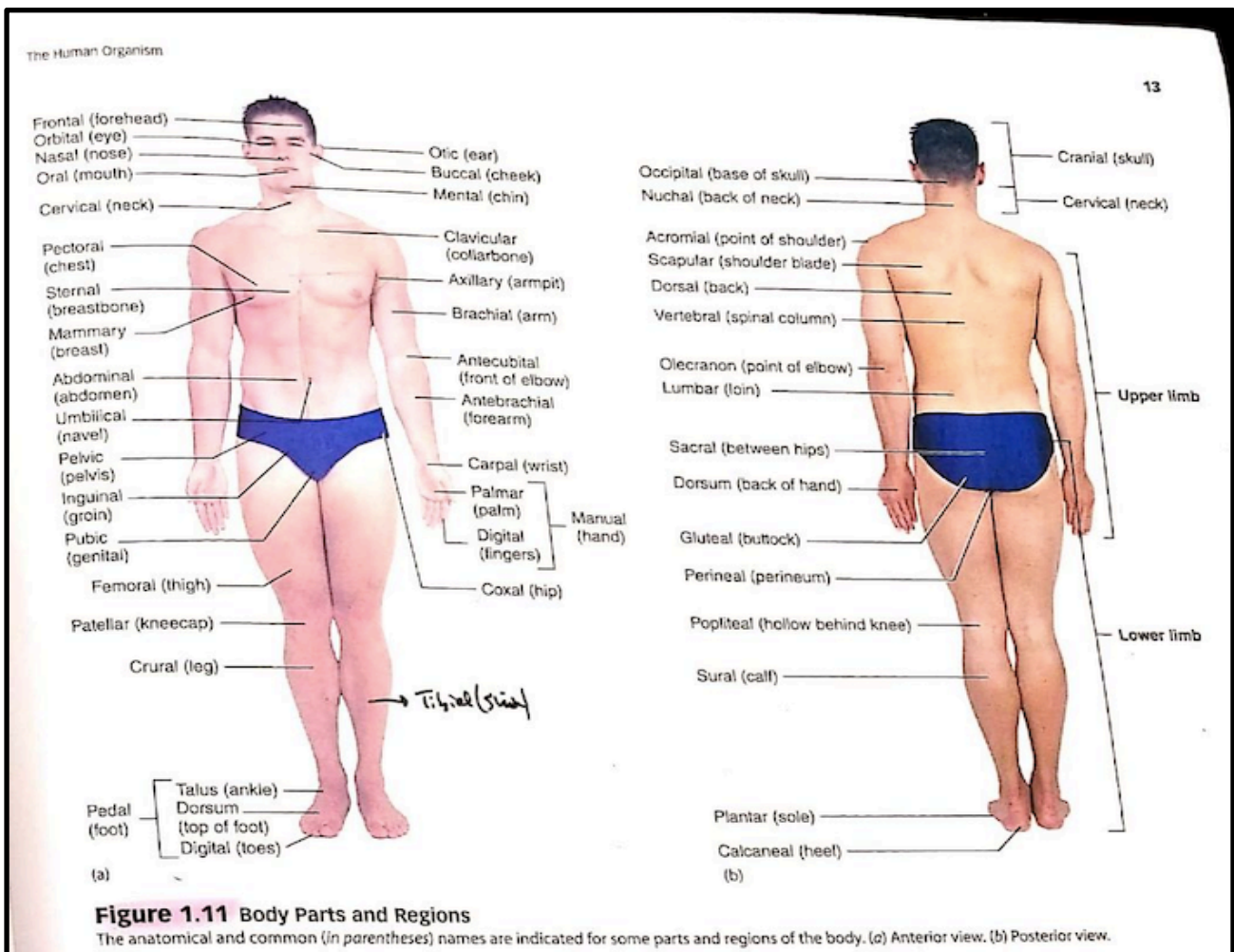
Anatomy & Physiology

DC & CP Summer work 2024

Requirement: Learn anatomy and physiology terminology. Be able to Identify human anatomy using correct anatomical terms

This Information will make up 50% of each weekly quiz taken during Unit 1 and will make up 10 to 15% of the Unit 1 test.

Anatomical Body Part Names:



Directional Terminology:

Terms	Definition	Example
Right:	Toward the right side of the body	The right ear
Left:	Toward the left side of the body	The left eye
Superior:	A structure above another	The chin is superior to the navel
Inferior:	A structure below another	The navel is inferior to the chin
Cephalic:	Closer to the head than another structure (usually synonymous with superior)	The chin is cephalic to the navel
Caudal:	Closer to the tail than another structure (usually synonymous with inferior)	The navel is caudal to the chin
Anterior:	The front of the body	The navel is anterior to the vertebral column (spine)
Posterior:	The back of the body	The spine is posterior to the sternum (breastbone)
Ventral:	Toward the belly (synonymous with anterior)	The navel is ventral to the spine
Dorsal:	Toward the back (synonymous with posterior)	The spine is dorsal to the sternum
Proximal:	Closer to the point of attachment to the body than another structure	The elbow is proximal to the wrist
Distal:	Farther from the point of attachment to the body than another structure	The wrist is distal to the elbow
Lateral:	Away from the midline of the body	The nipple is lateral to the sternum
Medial:	Toward the midline of the body	The bridge of the nose is medial to the eye
Superficial:	Toward or on the surface	The skin is superficial to muscle
Deep:	Away from the surface, internal	The lungs are deep to the ribs

Source: Tate, Phillip. *Seeley's Principles of Anatomy & Physiology*.

Prefixes, Suffixes, and root words

Knowing the roots or stems will allow you to understand medical terms and recognize how they are modified by prefixes and suffixes.

Term	Definition	Example
a, an-	Without, lack of	aphasia (lack of speech), anaerobic (without Oxygen)
ab-	Away from	abductor (leading away from)
-able	Capable	viable (capable of living)
acou-	Hearing	acoustics (science of sound)
acr-	Extremity	acromegaly (Large extremities)
ad-	To, toward, near to	adrenal (near the kidney)
adeno-	gland	adenoma (glandular tumor)
-al	Expressing relationship	neural (referring to nerves)
-algia	Pain:	gastralgia (stomach pain)
angio-	Vessel	angiography (radiography of blood vessels)
ante-	Before, forward	antecubital (before elbow)
anti-	Against, reversed	antiperistalsis (reversed peristalsis)
arthr-	Joint	arthritis (inflammation of a joint)
-ary	Associated with	urinary (associated with urine)
-asis	Condition, state of	homeostasis (state of staying the same)
Auto-	Self	autolysis (self breakdown)
bi-	Twice, double	bicuspid (two cusps)
bio-	Live	biology (study of living)
-blast	Bud, germ	fibroblast (fiber producing cell)
brady-	Slow	bradycardia (slow heart rate)
-c	Expressing relationship	cardic (referring to heart)
carcin-	Cancer	carcinogenic (causing cancer)
Cardio-	Heart	cardiopathy (heart disease)
Cata-	Down, according to	catabolism (breaking down)
Cephal-	Head	Cephalic (toward the head)
-cele	Hollow	Blastocele (hollow cavity inside a blastocyst)
Cerebro-	Brain	Cerebrospinal (referring to brain and spinal cord)
Chol-	Bile	Acholic (without bile)
Cholecyst-	Gallbladder	Cholecystkinin (hormone causing gallbladder to contract)
Chondr-	Cartilage	Chondrocyte (cartilage cell)
-cide	Kill	Bactericide (agent that kills bacteria)
Circum-	Around, about	Circumduction (circular movement)
-clast	Smash, break	Osteoclast (cell that breaks down bone)

Co-, com- con-	With, together	Coenzyme (molecule that functions with an enzyme)
Contra-	Against, opposite	Contralateral (opposite side)
Crypto-	Hidden	Cryptorchidism (undescended or hidden testes)
Cysto-	Bladder, sac	Cystocele (hernia of a bladder)
-cyte, cyto-	Cell	Erythrocyte (red blood cell, cytoskeleton (supportive fibers inside a cell))
De-	Away from	Dehydrate (remove water)
Derm-	Skin	Dermatology (study of the skin)
di-	Two	Diploid (two sets of chromosomes)
Dia-	Through, apart, across	Diapedesis (ooze through)
Dis-	Reversal, apart from	Dissect (cut apart)
-duct	Leading, drawing	Abduct (lead away from)
-dynia	Pain	Mastodynia (breast pain)
Dys-	Difficult, bad	Dysmentia (bad mind)
e-	Out, away from	Eviscerate (take out viscera)
Ec-	Out from	Ectopic (out of place)
Ecto-	On outer side	Ectoderm (outer skin)
-ectomy	Cut out	Appendectomy (cut out appendix)
-edem-	Swell	Myoedema (swelling of a muscle)
Em,- en-	In	Empyema (pus in), encephalon (in the brain)
-emia	Blood	Anemia (deficiency of blood)
Endo-	Within	Endometrium (within the uterus)
Entero-	Intestine	Enteritis (inflammation of the intestine)
Epi-	Upon, on	Epidermis (on the skin)
Erythro-	Red	Erythrocyte (red blood cell)
Eu-	Well, good	Euphoria (well-being)
Ex-	Out, away from	Exhalation (breathe out)
Exo-	Outside, on outer side	Exogenous (originating outside)
Extra-	Outside	Extracellular (outside the cell)
-ferent	Carry	Afferent (carrying to the central nervous system)
-form	Expressing resemblance	Fusiform (resembling a fusion)
Gastro-	Stomach	Gastrodynia (stomach ache)
-genesis	Produce, origin	Pathogenesis (origin of disease)
Gloss-	Tongue	Hypoglossal (under the tongue)
Glyco-	Sugar, sweet	Glycolysis (breakdown of sugar)
-gram	A drawing	Myogram (drawing of a muscle contraction)
-graph	Instrument that records	Myograph (instrument for measuring muscle contraction)
Hem-	Blood	Hemopoiesis (formation of blood)
Hemi-	Half	Hemiplegia (paralysis of half of the body)

Hepato-	Liver	Hepatitis (inflammation of the liver)
Hetero-	Different, other	Heterozygous (different genes for a trait)
Hist-	Tissue	Histology (study of tissues)
Homeo-, homo-	Same	Homeostasis (state of staying the same), homologous (alike in structure or origin)
Hydro-	Wet, water	Hydrocephalus (fluid within the head)
Hyper-	Over, above, excessive	Hypertrophy (overgrowth)
Hypo-	Under, below, deficient	Hypotension (low blood pressure)
-ia, -id	Expressing condition	Neuralgia (pain in nerve), flaccid (state of being weak)
-iatr-	Treat, cure	Pediatrics (treatment of children)
-im	Not	Impermeable (not permeable)
In-	In, into	Injection (forcing fluid into)
Infra-	Below, beneath	Infraorbital (below the eye)
Inter-	Between	Intercostal (between the ribs)
Intra-	Within	Intraocular (within the eye)
-ism	Condition, state of	Dimorphism (condition of two forms)
Iso-	Equal, the same	Isotonic (same tension)
-itis	Inflammation	Gastritis (inflammation of the stomach)
-ity	Expressing condition	Acidity (condition of acid)
Kerato-	Cornea or horny tissue	Keratinization (formation of a hard tissue)
-kin-	Move	Kinesiology (study of movement)
Leuko-	White	Leukocyte (white blood cell)
-liga-	Bind	Ligament (structure that binds bone to bone)
Lip-	Fat	Lipolysis (breakdown of fats)
-logy	Study	Histology (study of tissue)
-lysis	Breaking up, dissolving	Glycolysis (breakdown of sugar)
Macro-	Large	Macrophage (large phagocytic cell)
Mal-	Bad	Malnutrition (bad nutrition)
Malaco-	Soft	Osteomalacia (soft bone)
Mast-	Breast	Mastectomy (excision of the breast)
Mega-	Great	Megacolon (large colon)
Melano-	Black	Melanocyte (black pigment-producing skin cell)
Meso-	Middle, mid	Mesoderm (middle skin)
Meta-	Beyond, after, change	Metastasis (beyond original position)
Micro-	Small	Microorganism (small organism)
Mito-	Thread, filament	Mitosis (referring to threadlike chromosomes during cell division)
Mono-	One, single	Monosaccharide (one sugar)
-morph-	Form	Morphogenesis (formation of tissues and organs)
Multi-	Many, much	Multinucleated (two or more nuclei)

Myelo-	Marrow, spinal cord	Myeloid (derived from bone marrow)
Myo-	Muscle	Myocardium (heart muscle)
Narco-	Numbness	Narcotic (drug producing stupor or weakness)
Neo-	New	Neonatal (first four weeks of life)
Nephro-	Kidney	Nephrectomy (removal of the kidney)
Neuro-	Nerve	Neuritis (inflammation of a nerve)
Oculo-	Eye	Oculomotor (movement of the eye)
Odonto-	Tooth or teeth	Odontomy (cutting a tooth)
-oid	Expressing resemblance	Epidermoid (resembling epidermis)
Oligo-	Few, scanty, little	Oliguria (little urine)
-oma	Tumor	Carcinoma (cancerous tumor)
-op-	See, sight	Myopia (nearsighted)
Ophthalm-	Eye	Ophthalmology (study of the eye)
Ortho-	Straight, normal	Orthodontics (discipline dealing with the straightening of teeth)
-Ory	Referring to	Olfactory (relating to the sense of smell)
-ose	Full of	Adipose (full of fat)
-osis	Condition of	Osteoporosis (porous condition of bone)
Ostea-	Bone	Osteocyte (bone cell)
Oto-	Ear	Otolith (ear stone)
-ous	Expressing material	Serous (composed of serum)
Para-	Beside, beyond, near to	Paranasal (near the nose)
-pathy	Disease	Cardiopathy (disease of the heart)
-penia	Deficiency	Thrombocytopenia (deficiency of thrombocytes)
Per-	Through, excessive	Permeate (pass through)
Peri-	Around	Periosteum (around bone)
-phag	Eat	Dysphagia (difficulty eating or swallowing)
-phas-	Speak, utter	Aphasia (unable to speak)
-phil-	Like, love	Hydrophilic (water loving)
Phleb-	Vein	Phlebotomy (incision into a vein)
-phobia	Fear	Hydrophobia (fear of water)
-plas-	Form, grow	Neoplasm (new growth)
-plegia	Paralyze	Paraplegia (paralysis of lower limbs)
-pne-	Breathe	Apnea (lack of breathing)
Pneumo-	Air, gas or lungs	Pneumothorax (air in the thorax)
Pod-	Foot	Podiatry (treatment of foot disorders)
-poie-	Making, production	Hematopoiesis (make blood cells)
Poly-	Many, much	Polycythemia (excess red blood cells)
Post-	After, behind	Postpartum (after childbirth)

Pre-, pro-	Before, in front of	Prenatal (before birth), prosect (to cut before-for the purpose of demonstration)
Procto-	Anus, rectum	Proctoscope (instrument for examining the rectum)
Pseudo-	False	Pseudostratified (falsely layered)
Psycho-	Mind, soul	Psychosomatic (effect of the mind on the body)
Pyo-	Pus	Pyoderma (pus in the skin)
Re-	Back, again, contrary	Reflect (bend back)
Retro-	Backward, located behind	Retroperitoneal (behind the peritoneum)
-rrhagia	Burst forth, pour	Hemorrhage (bleed)
-rrhea	Flow, discharge	Rhinorrhea (nasal discharge)
Sarco-	Flesh or fleshy	Sarcoma (connective tissue tumor)
-sclero-	Hard	Arteriosclerosis (hardening of the arteries)
-scope	Examine	Endoscope (instrument for examining the inside of a hollow organ)
Semi-	Half	Semilunar (shaped like a half moon)
Somato-	Body	Somatotropin (hormone causing body growth)
-stasis	Stop, stand still	Hemostasis (stop bleeding)
Steno-	Narrow	Stenosis (narrow canal)
-stomy	To make an artificial opening	Tracheostomy (make an opening into the trachea)
Sub-	Under	Subcutaneous (under the skin)
Super-	Above, upper, excessive	Supercilia (upper brows)
Supra-	Above, upon	Suprarenal (above kidney)
Sym-, syn-	Together, with	Symphysis (growing together), synapsis (joining together)
Tachy-	Fast, swift	Tachycardia (rapid heart rate)
Therm-	Heat	Thermometer (device for measuring heat)
-tomy	Cut, incise	Phlebotomy (incision of a vein)
Tox-	Poison	Antitoxin (substance that counteracts a poison)
Trans-	Across, through, beyond	Transection (cut across)
Tri-	Three	Triceps (three-headed muscle)
-troph-	Nourish	Hypertrophy (enlargement or over nourishment)
-tropic	Changing, influencing	Gonadotropic (influencing the gonads)
-uria	Urine	Polyuria (excess urine)
Vas-	Vessel	vasoconstriction (decreased diameter of blood vessel)
Vene-	Vein	Venesection (phlebotomy)
Viscer-	Internal organ	Visceromotor (movement of internal organs)
Zyg-	Yoked, paired	Zygote (diploid cell)

Source: VanPutte, Regan & Russo. *Essentials of Anatomy & Physiology*