# Vocabulary List 6

# **Latin Prefixes**

#### ab-, a-, abs- (ab)

'away from', 'from'

 Abduction, abnormal, aversion, avocation, abstraction, abstain

#### ad-, ac-, ag- (etc.) (ad)

'to', 'toward', 'near'

adrenal, adverb, access, aggression, alleviate

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

#### ambi-, ambo- (ambi/ambo)

'both', 'around'

 ambidextrous, ambition, ambisexual, amboceptor, ambosexual

#### ante- (ante)

'before', 'in front of'

• antechamber, antecedent

#### circum-, circu- (circum)

'around'

• circumference, circumstance, circuitous

#### con-, com-, co-, etc. (*cum*)

'with', 'together', 'very'

 conduct, confine, compose, compress, correspond, cooperate, collect

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

#### contra-, contro- (contra)

'opposite', 'against' (through French, counter-)

 contradict, contraceptive, controversy, controvert, counteract, counterindicate

#### de- (de)

'down', 'away', 'off', 'thoroughly'

• describe, descend, depression NOTE: not to be confused with the Greek root DE-'binding' List 1.

#### dis-, di-, dif- (*dis-*)

'apart', 'in different directions', 'thoroughly'

 dissect, dispersion, divorce, digress, divert, differ, diffusion

NOTE: not to be confused with Greek prefix dia-'through' or root DI- 'twice' of List 1 and 4..

#### ex-, e-, ef- (e, ex)

'out', 'from', 'removal', 'completely'

• exclude, expel, exclamation, emit, elect, elongate, effective, expect

NOTE: after ex- an initial S in a root sometimes disappears, as in ex-(S)PECT and ex-(S)PIRE.

#### extra-, extro- (extra)

'outside of', 'beyond'

• extraordinary, extrasensory, extrovert

# in-, im-, etc. (in)

'into', 'on' (through French, en-)

• incision, induce, illuminate, imprint, irrigation, enclose

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

#### intra-, intro- (intra)

'within'

• intramural, introduce, introvert

#### in-, im-, etc. (in-)

'not'

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

• infirm, inefficient, impossible, illegible, irresponsible

#### infra- (infra)

'below'

• infrared, infrahuman, infraspecific

#### inter- (inter)

'between', 'among'

• interrupt, intercept, interact

#### juxta- (iuxta)

'by the side of', 'close to'

• juxtaposition, juxtaspinal

# ob-, etc. (*ob*)

'against', 'toward', 'completely'

• obstruct, obstacle, obvious, oppose, offer, occur

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

#### **per-** (*per*)

'through', 'wrongly', 'completely'

• perfect, permeate, pervade, perjury

#### post- (post)

'behind', 'after'

• postpone, postscript, postgraduate

#### pre- (prae-) (pre)

'before', 'in front of'

• prevent, prepare, precaution, praenomen, praetorian

#### pro- (pro)

'forward', 'in front of'

progress, project, prolong

#### re-, red- (*re-*)

'back', 'again', 'against'

• reduce, reject, recede, redundant, redemption

#### retro- (retro)

'backwards', 'behind'

• retroactive, retrospective, retrograde

#### se- (se, sine)

'aside', 'away'

• secede, select, secrete

#### sub-, sus-, suc-, etc. (sub)

'under', 'up from under', 'somewhat'

• submarine, subscribe, submerge, suspend, suffer, support

NOTE: Often the last consonant of this prefix to become the same as the first consonant of the root, a process known as assimilation

# super-, supra- (super)

'above'

• supernatural, superstructure, supersonic, suprarenal

#### trans-, tra-, tra- (trans)

'across', 'through'

 transmit, transfer, transfusion, transcribe, transcend, trajectory, travesty, tradition

#### ultra- (ultra)

'beyond'

• ultraviolet, ultramodern, ultrasonic

# **Latin Adjective-Forming Suffixes**

#### -able, -ible (-abilis, -ibilis)

'able to be', 'able to', 'tending to'

• durable, adaptable, incredible, flexible, adaptability, flexibility

NOTE: When this suffix is followed by another suffix, it becomes -abil-, -ibil-.

#### -aceous (-aceus)

'belonging to', 'resembling'

• herbaceous, cretaceous, chartaceous

#### -acious (= -ax + -ous)

'tending to', 'inclined to'

• vivacious, audacious, loquacious

#### -al, (-ial, -eal) (-alis)

'pertaining to', 'like', 'belonging to', 'having the character of'

• abdominal, legal, oral, corporal

# -an, -ane (-anus)

'pertaining to', 'like', 'belonging to', 'having the character of'

• urban, veteran, Canadian

#### -ent (*-ient*), -ant (*-iant*)

equivalent to the English present participle ending, *ing* (*-ens*, *-ans*); this suffix forms words meaning 'person who', 'that which'

• eloquent, innocent, dormant, vigilant, agent, current, inhabitant NOTE: this ending often forms adjectives, BUT sometimes these adjectives can stand in for nouns ("substantive adjectives").

• E.g. "the innocent (adjective) people" vs. "the innocent (substantive adjective acting as a noun)"

Other times, though, it just forms a noun.

#### **-id** (*-idus*)

'tending to', 'inclined to'

• fervid, frigid, vivid

#### -ile, -il (-*ilis*)

'pertaining to', 'like', 'belonging to', 'having the character of'

• hostile, juvenile, virile, civil NOTE: Distinguishable from the other -ile by the fact that it is attached to noun roots.

#### -ile (-ilis)

'able to be', 'able to', 'tending to'

• fragile, ductile, agile, docile NOTE: Distinguishable from the other -ile by the fact that it is attached to verbal roots.

#### -ar (*-aris*)

'pertaining to', 'like', 'belonging to', 'having the character of'

• lunar, solar, popular

#### -ary (-arius)

'pertaining to', 'connected with', 'having the character of'

- literary, sanguinary, military NOTE: this ending often forms adjectives, BUT sometimes these adjectives can stand in for nouns ("substantive adjectives").
  - E.g. "the military (adj.) aircraft" vs.
     "Canada's military" (substantive adjective acting as a noun)"

#### -ate (occasionally -ite) (-atus)

'having', 'having the shape of', 'characterized by having'

effeminate, accurate, dentate, favourite

$$-fic (= -fy + - ic)$$

'making', 'causing'

• terrific, pacific, scientific

NOTE: this adjectival suffix corresponds to the -fy verb-forming suffix (e.g. terrify, pacify), which will be learned later.

# -form (usually -iform) (-formis)

'like', 'having the shape of'

• reniform, muriform, oviform

#### -ic, -tic (-icus, -ticus)

'pertaining to', 'like'

• pelvic, civic, lunatic

#### -ine (-inus)

'pertaining to', 'like', 'belonging to', 'having the character of'

• bovine, marine, feminine

•

# -itious (-icius)

'tending to', 'characterized by'

• fictitious, excrementitious

# -ive (-ivus)

'tending to', 'inclined to'

• active, aggressive, adhesive

# -ory (-orius)

'tending to', 'serving for'

• preparatory, introductory, excretory

#### -ose (-osus)

'full of'

• verbose, rugose, comatose

# -ous, -ious, -eous (-osus, -us)

'full of', 'having the character of'

• various, populous, nervous

#### -(u)lent, -(o)lent (-lentus)

'full of', 'disposed to'

• fraudulent, purulent, sanguinolent, virulent

# -ulous (-ulus)

'tending to', 'inclined to'

• incredulous, tremulous, garrulous

# -uous (-uus, -uosus)

'tending to', 'inclined to'

• continuous, assiduous, impetuous

# **Latin Roots I**

#### **ARBOR-** (arbor, arboris)

'tree'

- ARBOR-eous, treelike or pertaining to trees;
- ARBOR-iz-at-ion, a conformation or arrangement resembling the branching of a tree

# **ARTICUL-** (articulus)

'joint'

- inter-ARTICUL-ar, between articulating parts of bones (applies to certain ligaments and fibrocartilages);
- BI-ARTICUL-ar, two-jointed

# BUCC- (bucca)

'cheek', 'mouth'

- BUCC-al, relating to the cheek or mouth;
- BUCCO-LINGU-al, pertaining to the cheeks and tongue;
- BUCCO-VERS-ion, condition of tooth's being out of the line of the normal occlusion in the buccal direction

#### CAL- (caleo)

'to be warm'

- CALE-FACI-ent, an externally applied medicine that causes a sensation of warmth;
- de-CAL-esc-ence, the decrease in temperature when rate of heat absorption exceeds rate of heat input

#### CARIN- (carina)

'keel'

- CARINA, any keel-like structure, as at the tracheal bifurcation;
- para-CARIN-al, beside a carina, especially the urethral carina

# CAUD- (cauda)

'tail'

- e-CAUD-ate, without a tail;
- NUDI-CAUD-ate, having a tail not covered with hair or fur;
- SACRO-CAUD-al, pertaining to the sacrum and tail region

#### CEREBR- (cerebrum)

'brain'

- CEREBR-al;
- CEREBR-in, a nitrogenous glycoside obtained from brain and similar tissue

#### CERN-, CRET-, CRE- (cerno → cretus)

'to separate', 'to distinguish', 'to secrete'

- se-CERN-ment, secretion, applied to the function of a glad;
- in-CRET-ion, internal secretion,
- se-CRET-agogue, substance promoting or causing secretion

#### CID-, CIS- (caedo/cido → caesus)

'to cut', 'to kill'

- MATRI-CIDE;
- REGI-CIDE;
- CON-CISE;
- suc-CISE, abrupt, appear as if a part were cut off;
- in-CIS-ura, a notch, depression or indentation, as in bone, stomach, liver, etc.

#### CILI- (cilium)

'eyelid', 'eyelash'

- super-CILI-ous;
- CILIA, hairlike, vibratile outgrowths of the ectoderm:
- CILI-ata, a class of phylum Protozoa characterized by the presence of cilia;
- CILIO-GRADE; progressing by movement of cilia

# CLUD-, CLUS-, CLOS- (claudo → clusus)

'to close', 'to shut'

- con-CLUDE;
- in-CLUS-ive;
- e-CLOS-ion, the act of emerging from the pupal case, or of hatching from the egg;
- ex-CLUS-ion, the process of shutting out in a surgical operation by which part of an organ is disconnected but not excised

#### CORD- (cor, cordis)

'heart'

- ac-CORD;
- con-CORD;
- CORD-ate, heart-shaped;
- sub-CORD-ate, tending to be heart-shaped;
- post-CORDI-al, situated behind the heart:
- pre-CORD-ium the area of the chest overlying the heart

#### CORN(U)- (cornu, cornus)

'horn'

- CORNU-COPIA;
- UNI-CORN:
- BI-CORNU-te, with two hornlike processes;
- CAVI-CORN, hollow-horned, applies to some ruminants;
- CORNI-FIC-ation, degenerative process by which cells of epithelium are converted into dead, horny tissue

#### COST- (costa)

'rib'

- COST-ate, with one or more longitudinal ribs or ridges;
- BI-COST-ate, having two longitudinal ridges or ribs, as a leaf;
- sub-COST-ALG-ia, pain beneath the ribs or over a subcostal nerve

#### CRUR- (crus, cruris)

'leg'

- CRURA (pl. of CRUS); the shanks, or leg-like or columnar structures
- GENITO-CRUR-al, pertaining to genitalia and leg

# CUB-, CUMB-, CUBIT- (cubo → cubitus; cumbare)

'to lie'

- suc-CUMB;
- in-CUMB-ent;
- in-CUB-us;
- pro-CUMB-ent, prone, lying face down (in dentistry, said of a tooth whose long axis approaches the horizontal);
- suc-CUB-ous, with each leaf covering part of the leaf beneath it

# CUR(R)-, CURS- (curro $\rightarrow$ cursus)

'to run', 'to go'

- CURR-ent;
- oc-CUR;
- con-CUR:
- ex-CURR-ent, pertaining to ducts, channels or canals where there is an outgoing flow, or with an undivided main stem, or having midrib projecting beyond the apex

#### **DENT-** (dens, dentis)

'tooth' (dens)

- in-DENT;
- TRI-DENT:
- DENT-ition, the process of teething, or the arrangement of the teeth;
- DENT-in, a hard, elastic substance, chemically resembling bone, composing the greater part of teeth;
- DENT-icle, a small, toothlike process

#### **DORM-**, **DORMIT-** (*dormio* → *dormitus*)

'to sleep'

- DORMIT-ory;
- ob-DORMIT-ion, numbness of a part due to interference with nervous function, sensation of a part 'being asleep';
- DORMIT-ive, inducing sleep

#### DORS- (dorsum)

'back'

- ante-DORS-al, situated in front of the dorsal fin in fish;
- DORS-ALG-ia, pain in the back;
- DORSO-CAUD-ad, to or toward the dorsal surface and caudal end of the body

#### DUC-, DUCT- $(dux \rightarrow ductus)$

'to lead', 'to draw'

- DUCT:
- de-DUCT-ion;
- ab-DUCT-ion, withdrawal of a part from the axis of the body or of an extremity;
- LEVO-DUCT-ion, movement to the left, especially of the eye

#### ERR- (erro)

'to wander', 'to deviate'

- ERR;
- ERR-or;
- ERR-ata;
- ERR-ant, with a tendency toward moving, straying or deviating

#### FEBR- (febris)

'fever',

- FEBR-ile, pertaining to or characterized by fever;
- FEBR-icula, a slight and transient fever

# FER- (ferro)

'to bear', 'to carry', 'to produce'

- suf-FER;
- re-FER;
- trans-FER;
- af-FER-ent, bringing toward (applies to nerves carrying impulse to nervous centres);
- OVI-FER-ous, serving to carry eggs;
- PROLI-FER-ate, to multiply

NOTE: not to be confused with the similar FERR-'iron' of List 9.

# FET- (FOET-) (fetus/foetus)

'offspring' 'fetus'

- FET-at-ion, the formation of a fetus, pregnancy;
- ex-FET-at-ion, extopic or extrauterine pregnancy

# FLEX-, FLECT- (flexo → flectus)

'to bend'

- re-FLECT-ion;
- re-FLEX, an involuntary, invariable, adaptive response to a stimulus;
- retro-FLEX-ion, the state of being bent backwards

#### FOLI- (folium)

'leaf'

- FOLI-age;
- FOLI-aceous, having the form or texture of a foliage leaf;
- pre-FOLI-at-ion, the form and arrangement of foliage leaves in a bud:
- ef-FOLI-at-ion, shedding of leaves NOTE: not to be confused with the similar FOLL(I)-'bag' of List 8.

# FRANG- (-FRING-), FRAG-, FRACT- (frango → fractus)

'to break', 'to bend'

- FRACT-ion;
- FRAG-ment;
- FRACT-ure; re-
- FRACT, to cause the deviation of a ray of light from a straight line in passing obliquely from one transparent medium to another of different density

#### **FUND-, FUS-** (fundo → fusus)

'to pour', 'to melt' (through French, FOUND-)

- FUS-ion;
- FUSE:
- dif-FUSE, spread out;
- per-FUS-ion, the introduction of fluids into tissues by their injection into arteries, or the passage of fluids through spaces

# GRAD-, GRESS- (gradior → gressus)

'to step', 'to go'

- DIGITI-GRADE, walking with only digits touching the ground;
- ORTHO-GRADE, walking or standing in the upright position;
- sub-PLANTI-GRADE, incompletely plantigrade, walking with the heel slightly elevated

#### **GREG-** (grex, gregis)

'flock',

- con-GREG-ate;
- se-GREG-ate:
- e-GREG-ious;
- GREG-arious, tending to herd together, or growing in clusters

#### HER-, HES- (haereo → haesus)

'to stick'

- ad-HER-ent, attached to a substratum;
- co-HES-ion, the attractive force between the same kind of molecules;
- ad-HESIO-tomy, the surgical cutting or division of adhesions

#### JECT- (JACUL-) (iacio → iectus)

'to throw'; 'dart' (jaculum)

- e-JECT:
- re-JECT;
- pro-JECT-ile;
- OVI-JECT-or, a highly muscular part of the oviduct in many nematode worms that forces the eggs through the genital pore;
- JACULAT-ory, darting out, capable of being emitted

#### LACT- (lac, lactis)

'milk'

- LACT-at-ion, the period during which the child is nourished from the breast, or the formation or secretion of milk;
- LACTI-FER-ous, forming or carrying milk

#### LATER- (latus, lateris)

'side'

- LATERI-GRADE, walking sideways, as a crab;
- ambi-LATER-al, relating to or affecting both sides;
- HETERO-LATER-al, pertaining to or situated on the opposite

# LINGU- (lingua)

'tongue', 'language'

- LINGU-ist-ics;
- BI-LINGU-al;
- FISSI-LINGU-al, having a bifid or cleft tongue;
- LINGUO-VERS-ion, displacement of a tooth on the lingual side of its proper occlusion

# MEDI- (medius)

'middle'

- MEDI-ate;
- MEDIO-DORS-al, on the median line of the back

#### **MENT-** (*mentum*)

'chin'

- MENT-al, pertaining to the chin;
- sub-MENT-al, beneath the chin;
- MENT-alis, a muscle of the lower lip

NOTE: don't confuse with homonymous MENT-'mind' of List 8.

#### MUR- (murus)

'wall'

- inter-MUR-al, situated between the walls of an organ;
- extra-MUR-al, outside the wall of an organ;
- MUR-al, pertaining to a wall, as a mural pregnancy

# NOMIN-, NOM- (nomen, nominis)

'name'

- NOMIN-al;
- NOMINAL-ism:
- para-NOM-ia, nominal aphasia, characterized by an inability name objects;
- BI-NOM-ial, consisting of two names

NOTE: Don't confuse with the similar Greek compound suffix -nomy 'science of' in List 2.

#### OV- (ovum)

'egg'

- OV-ul-at-ion;
- BIN-OV-ular, pertaining to two ova, applies to twinning;
- OVI-CIDE, an insecticide effective against an egg stage

# PLIC-, PLICIT- (plico → plictus)

'to fold'

• PLICA, a fold of skin or membrane;

- com-PLIC-ate, folded (said of leaves or of insect wings);
- PLIC-at-ion, the act or process of folding

# PON-, POSIT-, -POSE (pono → positus)

'to place', 'to put' (through French, POUND-)

- ex-PON-ent;
- im-POUND;
- ap-POSIT-ion, the state of being in juxta-POSIT-ion or proximity;
- trans-POSIT-ion, a change of position

# POT- (possum → potui)

'to be powerful'

- POT-ent-ial:
- OMNI-POT-ent;
- UNI-POT-ent, giving rise to only one cell or tissue type (said of an embryonic or multiplying cell);
- POT-ent-at-ion,effect of a substance which, when, added to another, makes the latter more potent as a drug

#### PUR- (pus, puris)

'pus'

- PUR-ulent, containing, consisting of, or forming pus;
- sup-PUR-ate, to form pus;
- PURO-HEPAT-itis, suppurative inflammation of the liver

#### RADI- (radius)

'spoke of a wheel', 'ray'

- RADI-ate;
- RADIO-re-CEPT-or, a terminal organ for receiving light or temperature stimuli;
- RADI-ole, a spine of a sea urchin;
- RADIO-therapy treatment of disease by x-rays, radium and other radioactive substances

#### REN- (ren, renis)

# 'kidney'

- ad-REN-al, adjacent to the kidneys, or relating to or derived from adrenal glands or their secretion;
- sub-REN-iform, slightly kidney-shaped;
- RENO-TROP-ic, specifically attracted to kidney tissue

# RUG- (ruga)

'wrinkle'

- RUGA, a fold or wrinkle, as of the mucous membrane of certain organs;
- RUG-os-ity, a condition exhibiting many folds in a tissue or integument

#### **SANGUI(N)-** (sanguis, sanguinis)

'blood'

- SANGU-ine:
- SANGUI-MOT-or, of or relating to the circulation of blood;
- con-SANGUIN-eous, related by birth or blood

#### **SEMIN-** (semen, seminis)

#### 'seed'

- dis-SEMIN-at-ion;
- SEMIN-al;
- SEMIN-at-ion, dispersal of seeds, discharge of spermatozoa;
- SEMIN-uria, discharge of semen in the urine

#### SICC- (siccus)

'dry'

- ex-SICC-ata, dried specimens;
- ex-SICC-ant, drying or absorbing moisture;
- SICC-ant, drying, tending to make dry

#### SON- (sonus)

'sound'

- ultra-SON-ic, pertaining to sounds with a frequency above that of audible sound;
- SONI-FIC-at-ion, the act or process of producing sounds, as stridulation of insects

#### SUD- (sudo)

'to sweat'

- ex-SUD-at-ion, process of oozing out slowly;
- SUDORI-FIC, inducing sweating;
- SUD-at-orium, a hot air bath or a room for such a bath

# TEG-, TECT- (tego → tectus)

'to cover'

- pro-TECT;
- de-TECT;
- TEG-men, the inner seed coat, or a covering structure or roof, esp. the thin plate over the tympanic atrium;
- sub-TEG-min-al, under the tegmen or inner coat of a seed

# TRUD-, TRUS- (trudo → trusus)

'to push', 'to thrust'

- in-TRUDE;
- in-ob-TRUS-ive;
- ex-TRUS-ion, a forcing out (in dentistry, extension of a tooth beyond the occlusal plain)

# TUSS- (tussis)

'cough'

- TUSS-ive, pertaining to or caused by a cough;
- TUSS-ilago, a genus of plants used as a remedy for cough

#### VAL- (valeo)

'to be strong', 'to be well'

- VAL-id;
- VALE-DICT-ory;
- bi-VAL-ent, applies to paired homologous chromosomes;
- VAL-ence, capacity of atoms to combine with other atoms in different proportions

#### **VARIC-** (varix, varicis)

'twisted and swollen (vein)'

- VARIC-ose, descriptive of blood vessels that are dilated, knotted and tortuous;
- NEURO-VARIC-osis, a varicosity on a nerve fibre;
- VARIX (pl. varices), prominent ridges across the whorls of univalve shells;
- VARIC-eal, relating to or involving a varix;
- VARICO-cele, a mass of varicose veins in the spermatic cord

#### VEN- (vena)

'vein'

- RECTI-VEN-ous, having straight veins;
- VEN-at-ion, the system or disposition of veins;
- VEN-ule, small vein of a leaf or insect wing

# VERT-, VERS- (verto → versus)

'to turn'

- VERTEX, the highest point (Latin 'whirlpool, crown of a head'), from which the word *vertical* comes;
- a-VERS-ion:
- VERS-at-ile, hung or attached near the middle and moving freely, as an anther;
- VERSI-COLOUR-ed, changing from one colour to another in different lights

# Vocabulary List 7

# **Latin Noun-Forming Suffixes**

# -ance, -ancy; -ence, -ency (-antia, -entia)

'quality of being', 'state of being'

• vigilance, hesitancy, eloquence, innocence, fluency

#### -ary (-arium)

'place for', 'apparatus'

• mortuary, library, infirmary, aquarium, sanitarium, herbarium

# -ble, -bul- (-bula, -bulum)

'result of the act of', 'means of', 'place for'

• fable, fabulous, mandible, mandibular, pabulum, infundibulum

# -cle, -cul- (-culum)

'result of the act of', 'means of'

 spectacle, receptacle, obstacle, tentacle, tentacular, curriculum, vinculum, tentaculum

#### -crum, -cr- (*-crum*)

'result of the act of', 'means of'

• fulcrum, simulacrum, involucrum, involucral

#### -ion (-io)

'act of', 'state of', 'result of the act of'

• action, commotion, incision

#### -itude (-itudo)

'quality of', 'state of'

• longitude, multitude, gratitude

# -ity (-ety, -ty) (-itas)

'quality of', 'state of'

• gravity, dexterity, brevity

#### -men, -min- (-*men*)

'result of', 'means of', 'act of'

• specimen, regimen, acumen, acuminate

#### -ment (-mentum)

'result of', 'means of', 'act of'

• ligament, ferment, excrement, momentum

#### -or (-*or*)

'she or he who', 'that which'

actor, motor, victor, incisor

NOTE: You may come across the suffix -trix, which is the Latin feminine ending which corresponds to the Latin masculine -or. So Director vs. Directrix. Modern English has largely done away with the -trix ending, using -or for all genders, but it still lingers.

#### -ory (-orium)

'place for', 'apparatus'

• dormitory, lavatory, auditorium, sanatorium

# -ure (-*ura*)

'act of', 'result of the act of'

• rupture, capture, fracture

#### **-us** (**-us**)

'act of', 'result of the act of'

• prospectus, consensus, impetus

# **-or** (**-or**) (**-or**)

'state of', 'result of the act of'

• tumour, pallor, error

# -trum, -tr- (*-trum*)

'result of the act of', 'means of'

• spectrum, rostrum, claustrum, claustrophobia

# -tude (-tudo)

forms abstract nouns

• beatitude, solitude

# **-y** (-*ia*)

'quality of', 'state of', 'act of'

• misery, modesty, perjury, neuralgia, insomnia, asonia

# **Latin Roots II**

#### ACIN- (acinus)

'grapes in a cluster'

- ACIN-ar, pertaining to an acinus, a small seed or kernel, as of a grape;
- inter-ACIN-ar, among alveoli of a racemose gland;
- ACIN-iform, grape- or berry- shaped (applied to a silk gland in a spider)

#### AL- (ala)

'wing',

- ALA, any winglike projection or structure;
- ex-AL-ate, not having winglike appendages, apterous;
- ALI-FER-ous, having wings;
- ALI-NOT-um, the dorsal plate of an insect to which wings are attached

#### ANNUL- (annulus)

'ring'

- ANNULUS, any ringlike structure;
- ANNUL-ose, possessing rings

#### APIC- (apex, apicis)

'tip', 'summit', 'apex'

- sub-APIC-al, nearly at the apex;
- peri-APIC-al, around an apex;
- APIC-ul-ate, forming abruptly to a small tip, as a leaf

#### AQU(A)- (aqua)

'water'

- AQUA-tic,
- AQUE-DUCT;

- AQUI-FER, a water-bearing bed or stratum of permeable rock, sand or gravel;
- AQUA REGIA, a mixture of nitric and hydrochloric acids which dissolves gold

#### **ARGENT-** (argentum)

'silver'

- ARGENT-eous, like silver;
  - ARGENTI-FER-ous, producing or containing silver;
- ARGENT-in-idae, family of small, silvery marine fishes

# **AUD-, AUDIT-** (audio → auditus)

'to hear'

- AUDIT-orium;
- AUDIT-ion;
- AUDIO-meter, an instrument for measuring the acuity and range of hearing;
- AUDIT-ive or AUDIT-ory, pertaining to heard sounds or the sense of hearing

#### **BREV-** (*brevis*)

'short'

- BREV-ity;
- ab-BREVI-ate;
- BREVI-PED, having short legs;
- BREVI-FOLI-ate, having short leaves;
- BREVI-LINGU-al, with a short tongue

#### BULL-, BULLI- (bulla)

'bubble', 'blister' 'to boil' (bollire)

- BULLA, a large bleb or blister forming either within or beneath the epidermis and filled with lymph;
- VESI-oluo-BULL-ous, characterized by both vesicles and bullae at the same time

NOTE: Not to be confused with the similar Greek root BUL- 'will' of List 1.

# CAD-, (-CID-), CAS- (cado → cecidi, casus)

'to fall', 'to befall'

- CAD-ence;
- de-CAD-ent;
- de-CID-uous:
- in-CID-ence, the act or manner of falling upon; the way in which one body strikes another, as angle of incidence

# CAMER- (camera)

'chamber'

- CAMERA; CAMER-ation, division into a number of separate chambers;
- UNI-CAMER-al, having only one cavity or chamber

#### CAN- (canis)

'dog'

- CAN-in-idae, family which includes dogs, wolves and jackals;
- CAN-in-iform, having the form of a typical canine tooth

NOTE: Not to be confused with the homonymous CAN- 'white' of List 10.

# CAP- (-CIP-), CAPT- (-CEPT-) (capio → captus/ceptus)

'to take', 'to seize'

- CAPT-ive;
- re-CEPT-ion;
- CON-CEPT-ion;
- EXTERO-CEPT-or, a receptor which receives stimuli from outside the body

#### **CAPILL-** (capillus)

'hair'

- CAPELL-ini;
- CAPILL-ary;
- CAPILL-ar-ec-TAS-ia, dilatation of the capillaries;
- CAPILL-aceous, having hairlike filaments

# CAPIT- (-CIPIT-) (caput, capitis)

'head'

- CAPIT-al; BI-CEPS;
- CAPIT-ulum or CAPIT-ellum, knoblike swelling on the end of bone:
- CAPIT-ell-idae, family of worms with small heads

#### COL- (colo)

'to inhabit'

- FUNGI-COL-ous, living in or on fungi;
- LATEBRI-COL-ous, inhabiting holes;
- DESERTI-COL-ous, desertinhabiting;
- RADICI-COL-ous, with the flower seated immediately upon the crown of a root, or dwelling in the root, as a parasite

NOTE: not to be confused with the similar Greek roots COL- 'neck' and COLL(A)- 'glue' of List 2 and 5 or the homonymous Latin roots COL- 'below'.

#### COLL- (collum)

'neck'

- COLL-ar bone, the clavicle;
- TORTI-COLL-ar, affected with wryneck or TORTI-COLL-is

NOTE: See above note.

#### **CORI-** (corium)

'skin'

- CORIUM, the deep layer of the skin;
- CORI-aceous, leathery (applies to leaves);
- CORI-aria, a genus of poisonous shrubs used in dyeing and tanning

#### CORON- (COROLL-) (corona)

'crown'; 'little crown' (corolla), diminutive form.

- COROLLA, the petals of a flower;
- COROLL-aceous, pertaining to a corolla;
- CORON-illa, genus of flowers named for crown-shaped flowers

#### **CORTIC-, CORT-** (cortex, corticis)

'bark', 'outer layer'

- CORTEX, outer or more superficial part of an organ, the cerebral cortex;
- infra-CORTIC-al, beneath the cortex;
- CORTICI-PET-al, conducting toward the cortex

# CREPIT- (crepito)

'to creak', 'to crackle'

- de-CREPIT;
- de-CREPIT-at-ion, the breaking up or crackling of certain crystals on heating;
- CREPIT-at-ion or CREPIT-at-io or CREPITUS, the grating of fractured bones, or the crackling of a joint

#### CRIST- (crista)

'crest'

- CRISTA, a crest;
- CRISTA TERMIN-alis, crest on the wall of the right atrium; inter-
- CRIST-al, between the surmounting ridges of a bone, organ or process (used particularly in intercristal diameter of pelvis, the distance between two clear crests)

#### CRUC- (crux, crucis)

'cross'

- CRUCI-FY; ex-CRUCI-at-ing;
- CRUCI-FER, a plant with four petals and tetradynamous stamens, a member of the family Cruciferae;
- CRUCI-ate, cross-shaped

#### CUNE- (cuneus)

'wedge'

- CUNE-iform;
- CUNE-ate, wedge-shaped;
- prae-CUNE-us, the medial surface of the parietal or the quadrate lobe of the cerebrum

#### **DUR-** (durus)

'hard', 'dura mater'

- en-DURE;
- ob-DUR-ate;
- in-DUR-at-ion, the hardening of a tissue or part;
- epi-DUR-al, space between the dura mater and the wall of the vertebral canal:
- DUR-amen, hard darker central region of a tree stem, heart-wood

# ENS- (ensis)

'sword'

• ENS-iform, sword-shaped, as the ensiform cartilage

#### **EQU-** (equus)

'horse'

- EQU-estrian;
- EQU-it-at-ion;
- EQU-it-ant, overlapping saddle-wise, as leaves in a leaf-bud;
- EQU-idae, family of mammals having a single extant genus, Equus, which includes the horse, ass and zebra

#### FALC- (falx, falcis)

'sickle'

- FALX, sickle-shaped fold of dura mater;
- FALC-ate, sickle-shaped, hooked

# FAEC- (FEC-) (faeces)

'excrement', 'sediment'

- FAECA-LITH, concretion or calcified mass of faecal material (= COPRO-LITH);
- FAEC-al-oid, resembling faeces;
- FAEC-ula, the faecal pellet of an insect

# FLA-, FLAT- (flare → flatus)

'to blow'

- ex-suf-FLAT-ion, forced discharge of breath;
- FLAT-ul-ence, having gas in the stomach and intestinal tract

#### FLOR- (flos, floris)

'flower'

- FLOR-ist;
- FLOR-id;
- ef-FLOR-esc-ence, eruption of exanthemous disease;
- extra-FLOR-al, situated outside the flower:
- pre-FLOR-at-ion, the form and arrangement of flowers in the bud

#### **FORNIC-** (fornix, fornicis)

'arch'

- FORNIX, an arched body or surface, such as the fornix cerebri;
- FORNIC-al, like or pertaining to a fornix

# FUG- (fugo)

'to flee', 'to put to flight'

- re-FUGE;
- FUGI-tive;
- NIDI-FUG-ous, leaving the nest soon after hatching;
- CEREBRI-FUG-al, applies to nerve fibres which pass from the brain to the spinal cord;
- LACTI-FUGE, a drug or agent that lessens the secretion of milk

# GER-, GEST- (gero → gestum)

'to carry', 'to bear'

- di-GEST, to convert food in assimilable form;
- in-GEST, to take substances into the body;
- OVI-GER, a leg modified for carrying the eggs in some pycnogonids (sea spiders)

NOTE: not to be confused with the Greek root GER-'old' of List 1.

#### **GRAV-** (gravis)

'heavy'

- in-GRAV-esc-ent, increasing in weight or severity;
- GRAVI-GRADE, any of several large, heavy-footed mammals, as elephants;
- PRIMI-GRAV-ida, a woman who is pregnant for the first time

# GUTT- (gutta)

'drop'

- GUTT-er; GUTT-ate, having drop-like markings;
- GUTT-at-ion formation of drops of water on plants;
- GUTT-iform, drop-shaped;

• GUTT-ul-ate, in the form of a small drop, as markings

#### JAC- (iacio)

'to lie'

- ad-JAC-ent, lying nearby, having a common border;
- sub-JAC-ent, lying beneath

#### LAB-, LAPS- (labo; lapso)

'to slip', 'to fall', 'to glide'

- LAPSE:
- col-LAPSE;
- re-LAPSE;
- LAB-ile, unstable, readily changing, moving from place to place;
- LAB-il-ity, in psychiatry, very rapid fluctuation in intensity and modality of emotions

NOTE: careful not to confuse with similar LABI-'lip' of List 9

#### LACRIM- (LACHRYM-) (lacrima)

'tear'

- LACRIM-al, pertaining to tears or to tear-secreting organs, the lacrimal bone;
- NASO-LACRIM-al, pertaining to the nose and lacrimal apparatus

#### LACUN- (lacuna)

'small pit', 'gap'

- LACUNA, a space between cells; a sinus; a cavity in bone; a small cavity or depression on the surface of lichens; a leaf gap;
- LACUN-oso-RUG-ose, having deep furrows or pits, as some seeds and fruits

#### LIMIN- (limen, liminis)

'threshold'

- e-LIMIN-ate:
- LIMEN, threshold, minimum stimulus or quantitative difference in stimulus that is perceptible, or boundary;
- LIMEN NASI, boundary between the osseous and cartilaginous portions of the nasal cavity;
- LIMIN-al, pertaining to a threshold, applies to stimulus, sensations

#### LINE- (linea)

'line'

- LINE-ar;
- de-LINE-ate:
- LINE-at-ion, an arrangement of lines:
- LINE-ol-ate, marked by fine lines or striae

# LUC- (lux, lucis)

'light', 'to shine'

- LUC-id;
- e-LUC-id-ate;
- NOCTI-LUC-ent, phosphorescent, luminescent;
- LUCI-FUG-al, fleeing from or avoiding light

#### MAL- (mala)

'cheek', 'cheekbone'

• MAL-ar, pertaining to the cheek or to the zygoma

NOTE: Don't confuse with similae MAL(E)- 'bad' and MALLE 'hammer' of List 10

#### MATR-, MATERN- (mater; maternus)

'mother'

- MATRO-CLIN-ous, derived from or inherited from the maternal line;
- MATR-ix, something within which something else originates or takes form or develops

#### MOLL- (mollis)

'soft'

- MOLL-ities, softness;
- MOLL-SOL, surface layer of permanently frozen ground in which ice melts during the summer;
- e-MOLL-ient, a substance used externally to soften the skin

#### **MONT-** (mons, montis)

'mountain'

- MONTI-COL-ous, inhabiting mountainous regions;
- MONT-iculus, largest part of the superior vermis of the cerebellum;
- MONT-icules, small eminences or prominences

#### MORB- (morbus)

'disease'

- MORB-id;
- MORB-ose:
- morbus anglicus, rickets;
- *morbus divinus* or *morbus caducus*, epilepsy;
- morbus hungaricus, typhus

# MOV-, MOT- (moveo → motus)

'to move'

- pro-MOTE;
- de-MOT-ion;
- OCULO-MOT-or, causing movements of the eyeball (applies to the third cranial nerve);
- VENO-MOT-or, causing veins to contract or dilate

#### MULT- (multus)

'many'

- MULTI-CARIN-ate, having many carinae or ridges;
- MULTI-COST-ate, with many ribs, ridges or veins;
- MULTI-OCUL-ur, many-eyed

#### NAEV- (NEV-) (naevus)

'birthmark', 'mole'

- NAEVUS, birthmark;
- NAEV-al, of or related to a naevus;
- NAEVO-XANTHO-endo-THELIoma, a group or group of yellowish brown nodules sometimes found on extremities in early childhood

# NASC-, NAT- $(nascor \rightarrow natus)$

'to be born'

- NAT-ive.
- NAT-ure:
- NAT-ion;
- ad-NATE, congenitally attached or united;
- in-NATE, inherited, present from birth;
- ante-NAT-al, occurring or existing before birth, prenatal

#### NID- (nidus)

'nest'

- NID-at-ion, the renewal of uterine lining between menstrual periods;
- de-NID-at-ion, disintegration and ejection of superficial part of uterine mucus;
- NID-ament-al, applies to glands which secrete material for an eggcovering

#### OCUL- (OCELL-) (oculus)

'eye'; 'little eye' = *ocellus*, Diminutive form

- MON-OC-le;
- OCELL-ate, like an eye or eyes, applies to marking in many animals;
- TRANS-OCUL-ar, extending across the eye;
- MON-OCULE, a one-eyed animal

# PALAT- (palatum)

'palate', 'roof of the mouth'

- PALAT-ine, pertaining to or in the region of the palate (said of artery, bone, foramen);
- PALAT-itis, inflammation of the palate;
- PALAT-iform, resembling the palate

#### **PARIET-** (paries, parietis)

'wall'

- PARIES, wall of a hollow structure;
- PARIET-al, pertaining to or forming part of the wall of a structure (of cells, membrane, etc.), also the parietal bone in the roof of the skull;
- UTERO-PARIET-al, pertaining to the uterus and abdominal wall

# PATI-, PASS- (patior → passus)

'to suffer', 'to endure'

- PATI-ent;
- PASS-ion, an intense emotion; com-
- PAT-ibil-ity, congruity; the power of a medicine or a substance in a medicine to mix with another without deleterious chemical change or loss of therapeutic power; refers also to blood types

# PLAN- (planus)

'flat'

- PLANE:
- de-PLAT-ate, levelled, flattened;
- PLAN-at-ion, a process of erosion that produces flat surfaces;
- PLAN-ula, very young, flat-bodied larva or free-swimming coelenterates

NOTE: don't confuse with Greek root PLAN-'wandering' of List 4.

#### PLANT- (planta)

'sole of the foot', 'sprout'

- PLANTA-, the sole of the foot, or the first tarsal joint of insects;
- PLANTI-GRADE, walking on the full sole of the foot;
- im-PLANT;
- trans-PLANT-at-ion

#### **PONT-** (pons, pontis)

'bridge'

- PONT-oon:
- PONTI-FF;
- PONS, a process or bridge of tissue connection two parts of an organ, or a convex white eminence situated at the base of the brain:
- CEREBRO-PONT-ine, relating to cerebrum and pons;
- PONTO-BULB-ar, pertaining to the pons and the medulla oblongata

# PRUR-, PRURIT- (prurio → pruritus)

'to itch'

- PRURITUS, itching;
- anti-PRURIT-ic, relieving or preventing itching;
- PRUR-igo, a chronic inflammatory disease of the skin characterized by itching

# PULVER-, PULV- (pulvus, pulveris)

'dust'

- PULVER-ize:
- PULVI-PLUME, a powder-down feather;
- PULVER-aceous, covered with a layer of powdery granules

#### PULVIN- (PULVIL-) (pulvinus);

'cushion'; 'little cushion' (pulvillus), diminutive form.

- PULVINUS, a cellular swelling at the junction of axis and leaf stalk;
- PULVILLUS or PULVIN-ulus, pad, process or membrane on the foot or between the claws, the lobe between each claw

#### RADIC- (radix, radicis)

'root'

- RADIC-al;
- e-RADIC-ate:
- RADIC-ul-ose, having many rootlets;
- MONO-RADIC-ul-ar, having only one root;
- MYELO-RADIC-ul-itis, inflammation of spinal cord and roots of spinal nerves

#### RAM- (ramus)

'branch'

- RAMI-fic-at-ion;
- RAM-ate, branched;
- BI-RAM-ose, divided into two branches:
- RAMI-FLOR-ous, having flowers on branches

# REG- (-RIG-), RECT- (regere → rectus)

'to make straight', 'to rule' (regere, v.); 'straight', 'rectum' (rectus, adj.)

- REG-ent:
- di-RECT;
- ar-RECT-or a muscle which erects; para-RECT-al, beside or near the rectum;
- REG-imen, a systematic plan or course to maintain or improve health

#### RET- (rete)

'net', 'network'

- RETE, a network or net;
- RET-ina, the light-receptive layer and terminal expansion of the optic nerve in the eye;
- RET-icle or RET-iculum, a delicate network of cell protoplasm

#### **ROSTR-** (rostrum)

'beak'

- ROSTRUM, beak or beaklike process;
- LONGI-ROSTR-al, with a long beak;
- ROST-ell-iform, shaped like a small beak

# RUMP-, RUPT- (rumpo → ruptus)

'to break', 'to burst'

- ab-RUPT;
- inter-RUPT:
- ab-RUPT-ion;
- RUPT-ure, a forcible tearing of a part, or a hernia;
- RUPT-io, rupture of a vessel or organ

#### SAX- (saxum)

'rock'

- SAXI-CAV-ous, applies to rockborers (as some molluscs), lithophagous;
- SAXI-FRAGE, plant of the family Saxifraga, perennial herbs frequently found growing in rock crevices;
- SAXI-COL-ous, inhabiting or growing around rocks

#### SCIND-, SCISS- (scindo → scissus)

'to cut', 'to split'

- re-SCIND;
- SCISS-ile, separating, easily split;
- ab-SCIND, to cut off;
- dis-SCISS-ion, state of being torn apart

#### **SCUT-** (*scutum*)

#### 'shield'

- ESCUT-cheon;
- SCUTE, an external scale, as of reptiles, fish or scaly insects;
- SCUT-ate protected by large scales or horny plates

#### SEN- (senex)

#### 'old'

- SEN-ior; SEN-ate;
- pre-SEN-il-ity, premature old age;
- SEN-OP-ia, the change of vision in the aged in which persons formerly myopic acquire what seems to be normal vision because of presbyopia

#### SERR- (serra)

'saw', 'saw-tooth'

- SIERRA:
- SERR-at-iform, like a saw;
- sub-SERR-ate, somewhat notched or saw-toothed;
- SERRI-CORN-ia, a genus of beetles with saw-toothed antennae

#### **STERCOR-, STERC-** (*stercus*, *stercoris*)

#### 'excrement'

- STERCO-BIL-in, the brown pigment of faeces;
- STERC-oma, a fecalith, a hard faecal mass, usually in the rectum;
- STERC-ul-ia, a type of plant with a fetid odour

#### **SULC-** (sulcus)

'furrow', 'groove'

- SULC-ate, furrowed, grooved;
- BI-SULC-ate, having two grooves;
- SULCO-MARGIN-al, situated at the margin of the spinal cord adjacent to the ventral median fissure

# TANG- (-TING-), TIG-, TACT- (tango → tactus, -tingere)

'to touch'

- con-TACT;
- con-TING-ent;
- TACT-ile, pertaining to the sense of touch;
- a-TACT-ia, loss of the tactile sense;
- MYO-TACT-il-ic, relating to the muscular sense

# TORQU-, TORT-, TORS- (torqueo → torsi, tortus)

'to twist'

- TORT:
- re-TORT;
- TORT-ure;
- dis-TORS-ion, the act of twisting;
- LATERO-TORS-ion, a twisting to one side; con-TORTU-PLIC-ate, applies to a bud with contorted and plicate leaves

# VERM- (vermis)

'worm'

- VERMI-celli;
- VERM-icul-at-ion, wormlike or peristaltic movement, or fine, wavy markings;
- VERMI-LINGU-al, having a wormshaped tongue;
- VERMI-PAR-ous, producing wormlike young, as do blowflies

# **VESIC-** (vesica)

'bladder', 'blister'

- VESIC-le, a small bladder, especially a small sac containing fluid, a small bulla;
- peri-VESICUL-itis, inflammation around a seminal vesicle;
- VESIC-at-ion, the formation of a blister, or a blister itself.

# Vocabulary List 8

# **Latin Diminutive Suffixes (Noun-forming, mostly)**

```
-cule, -cle (-culus, -cula, -culum)
'little'
    • molecule, muscle, particle
NOTE: -cule can also form adjectives, like miniscule or majuscule
-el (-ellus, -ella, -ellum)
'little'
       tunnel, scalpel, morsel, lamella, flagellum, capitellum, cerebellum
-ette, -et
'little' (of French origin, but attaching to Latin roots)
    • statuette, cornet, lancet
-il (-illus, -illa, -illum)
'little'
    • codicil, pupil, fibril, fibrilla, Priscilla, armadillo
-ule, -ole, -le (-ulus, -ula, -ulum; -olus, -ola, -olum; -leus, -lea, -leum)
'little'
       globule, granule, arteriole, circle, scruple, gladiolus, formula, cupola, capitulum
-uncle (-unculus)
'little'
      carbuncle, avuncular, furnuncle, pedunculus, ranunculus
```

# **Latin Roots III**

#### AC(U)- (acus)

'sharp', 'sour', 'needle'

- ACU-PUNCT-ure;
- ACU-ol-ate, beset with small prickles;
- ACUTI-COST-al, having projecting ribs

# ADIP- (adeps, adipis)

'fat'

• ADIP-os-ity, corpulence, obesity

#### AMBUL- (ambulo)

'to walk'

- AMBLE;
- AMBUL-ance:
- AMBUL-ant or AMBUL-at-ory, walking or able to walk, designating a patient not confined to bed but requiring medical care;
- SOMN-AMBUL-ism, sleepwalking

#### ANS- (ansa)

'jug handle', 'loop'

- ANSA, loop, as of certain nerves;
- ANSA CERVIC-alis, a nerve loop in the neck

#### ARE- (area)

'space'

- ARE-ola, any minute interstice or space in a tissue; or a pigmented ring surrounding some central point or space, as a nipple or a pustule, or the part of the iris enclosing the pupil;
- ARE-ol-et, a small areola

#### AUR- (auris)

'ear'

- end-AUR-al, pertaining to the inner surface or part of the external auditory canal;
- AUR-icle, any ear-like, lobed appendage, or the external ear, or the atrium, or anterior chamber, of the heart

#### CALC- (calx, calcis)

'limestone', 'pebble', 'calcium'

- CALC-ulus;
- CALCI-COLE, a plant that thrives in soils rich in calcium salts;
- CALCI-FIC-at-ion, the deposition of lime salts in tissue;
- CALC-ar-eous, containing calcium carbonate (chalky)

NOTE: don't confuse with the root CALCAR- 'spur' and CALC 'heel' of Lists 9 and 10.

# CALL- (callus)

'hard skin'

- CALL-ous, pertaining to an are of hardened and thickened skin, a CALLUS;
- CORPUS CALLOSUM, a structure of white matter in the brain

#### CAPS- (capsa)

'box'

- CAPS-ule:
- en-CAPS-ul-at-ion, the process of surrounding a part with a capsule;
- de-CAPS-ul-at-ion, removal of a capsule or enveloping membrane

#### CAR(N)- (caro, carnis)

'flesh'

- CARN-al;
- CARN-eous, flesh-coloured; in-
- CARN-at-ive, an agent which produces flesh or promotes granulation;
- CARNI-VOR-ous

#### CED-, CESS- ( $cedo \rightarrow cessus$ )

'to go', 'to yield'

- con-CEDE;
- intro-CESS-ion, a depression, as of a surface;
- pro-CESS, a prominence or outgrowth;
- suc-CED-an-eous, relating to or acting a substitute; pertaining to that which follows after, as a permanent tooth replacing a deciduous tooth

# CRE-, CRESC-, CRET- (cresco → cretus)

'to grow'

- in-CRE-ment;
- CRESC-ent:
- CRESC-endo;
- con-CRESC-ence, a growing together of the roots of two teeth;
- inter-CRESC-ence, a growing into each other, as of tissue

#### CUT- (cutis)

'skin'

- intra-CUT-aneous, within the skin substance (applied to the injection of substances into the skin);
- CUT-in, a substance allied to cellulose found in external layers of thickened epidermal cells

NOTE: not to be confused with the homonymous CUT- 'shake' of List 9.

#### **DEXTR-** (dexter, dextri)

'right' (direction), 'right hand'

• DEXTRO-DUCT-ion, movement of the visual axis toward the right

# **DIGIT-** (digitus)

'finger', 'toe'

- DIGIT-ule, any small, fingerlike process;
- SEX-DIGIT-ate, with six fingers or toes

# FA-, FAT- (fare $\rightarrow$ fatus)

'to speak'

- af-FA-ble;
- in-ef-FA-ble;
- FA-ble;
- in-FA-nt, a child, usually up to two years (in Latin, literally 'not speaking' or 'without speech')

# FAC- (-FIC-), FACT- (-FECT-) (facio → factus)

'to do', 'to make'

- FACT-ory;
- FACT; FICT-ion;
- ef-FIC-acious, having the power to bring about a desired effect;
- FAC-ul-tat-ive, voluntary, optional; having the power to do or not do a thing

#### FIBR- (fibra)

'fibre'

- FIBR-il, a component filament of a fibre, as of a muscle or a nerve;
- FIBR-in, the fibrous, insoluble protein in the network involved in blood clotting

# FID-, FISS- (findo → fidi, fissus)

'to split'

- FISS-ure;
- FISS-ion;
- FISS-ile, fissionable;
- FISSI-ROSTR-al, with deeply cleft beak;
- PENTA-FID, divided in five divisions or lobes

# FLU-, FLUX- (fluo → fluxum)

'to flow'

- in-FLU-ence;
- FLU-ency;
- af-FLUX, flow of blood or other fluid to a part;
- con-FLU-ent, running together, the opposite of discrete; in anatomy, coalesced or blended (applied to two or bones originally separate)

# FLUVI- (fluvius)

'river'

- Fluvial
- FLUVI-al-ist, someone who explains geological and geographical phenomenon by the action of existing streams

#### FOLL(I)- (follis)

'bag'

- FOLLI-cle, a capsular fruit which opens on one side only, or a cavity or sheath (as an ovarian or hair follicle), or a small secretory cavity or sac (as an acinus or alveolus);
- peri-FOLLI-cul-ar, surrounding a follicle

NOTE: not to be confused with the similar FOLI-'leaf' of List 6.

#### **FORMIC-** (formica)

'ant'

- FORMIC acid, a colourless acid occurring in ants and some plants;
- FORMIC-IDE, a substance used for destroying ants;
- FORMIC-at-ion, an abnormal sensation of insects crawling on the skin

# FOSS- (fossa)

'ditch', 'trench', 'to dig'

- FOSSA, a pit or trench-like depression;
- FOSS-ette, a small pit or a socket containing the base of the antennule in arthropods;
- FOSS-ori-al, adapted for digging (applies to the claws and feet of animals)

#### **FUN-** (funis)

'rope', 'cord'

- FUN-ic, relating to or originating in the umbilical cord;
- FUNI-PENDUL-ous, suspended by a rope or cord

# GUST- (gusto)

'to taste'

- dis-GUST:
- GUST-at-ion, the sense of taste, the act of tasting;
- de-GUST-at-ion, the act of tasting;
- GUSTO-meter, an apparatus used to determine taste thresholds

# **HAUST-** (haurio → haustum)

'to draw out', 'to drink'

- ex-HAUST-ion;
- HAUST-ellum, a proboscis adapted for sucking;
- HAUST-orium, an organ of certain parasitic protozoa by which they attach themselves to the host

#### **INSUL-** (insula)

'island'

- INSUL-ate:
- PEN-INSULA; INSULA, that portion of the cortex overlying the corpus striatum
- INSUL-oma, a tumour arising from the cells of the islets of the pancreas;
- INSUL-in, the antidiabetic hormone arising from the islets of Langerhans

# JUNCT-, JUG- (iungo → iunctus; jugum)

'to join'; 'yoke'

- JUNCT-ion;
- sub-JUG-ate;
- con-JUG-at-ion, the temporary union or complete fusion of two gametes or unicellular organisms, or the pairing of chromosomes;
- dis-JUNCT-ion divergence of paired chromosomes at anaphase

#### LEV- (laevus)

'left' (direction), 'left hand'

- LEVO-DUCT-ion, movement to the left, especially of the eye;
- LEVO-GYR-ate or LEVO-ROT-ary, rotating the plane of polarized light to the left

NOTE: don't confuse with homonymous LEV-'light' of List 9.

#### LOC- (locus)

# 'place'

- LOC-al; al-LOC-ate;
- LOCO-MOT-ion;
- LOC-ellus, a small compartment of an ovary;
- BI-LOC-ul-ar, containing two cavities or chambers

#### LUN(A)- (luna)

'moon'

- LUN-ate, crescent-shaped;
- SEMI-LUN-ar, half-moon-shaped;
- LUN-ette, the transparent lower eyelid of snakes

#### MACUL- (macula)

'spot', 'stain', 'blot'

- im-MACUL-ate;
- MACULA, a spot or patch of colour, or a small pit or depression;
- MACULA LUTEA, the yellow spot on the retina, the point of clearest vision;
- MACUL-at-ion, the arrangement of spots on a plant or animal

TIP: the Latin *macula* became the modern Italian *macchia*. English speakers encounter it most when ordering a macchiato coffee, so-called because it looks "blotted"

# MAGN- (magnus)

'large', 'great'

- MAGN-ate:
- MAGN-ANIM-ous;
- MAGNI-LOQU-ent;
- MAGNI-fy, cause to appear larger;
- MAGN-itude, spacial quality or size

#### MAMM- (mamma)

'breast'

- MAMM-al;
- MAMM-il-itis, inflammation of the
- MAM-illa, or nipple

#### **MENT-** (mens, mentis)

'mind'

- MENT-at-ion, the mechanism of thought, mental activity;
- de-MENT-ia, deterioration or loss of the intellectual faculties, the reasoning power, etc.

NOTE: not to be confused with the homonymous MENT- 'chin' of List 6.

#### **MORT-** (mors, mortis)

'death'

- MORT-al, liable to death or causing death;
- MORT-al-ity, the quality of being mortal or the death rate;
- NATI-MORT-al-ity, the proportion of stillbirths to the general birth rate

#### **NERV-** (nervus)

'nerve', 'vein of insect wing or leaf'

- TRI-NERV-ate, having three veins or ribs running from the bast to the margin of a leaf;
- ab-NERV-al, away from a nerve (of the direction of an electric current passing through muscle fibres away from the point of entrance of a nerve)

#### NOC-, NOX- (noxa. cf. nocere "to harm")

'harm'

- in-NOC-ent;
- NOCI-FENS-or, efferent fibres which release chemical substances at their terminals, thus stimulating pain endings;
- NOCI-per-CEPT-ion, perception of pain by the central nervous system

# **NOCT-** (nox, noctis)

'night'

- NOCTI-phobia, morbid fear of night;
- per-NOCT-at-ion, staying up all night;
- NOCT-VAG-ant, going about in the night, night-wandering

#### **OST-** (ostium)

'door', 'opening'

- OSTIUM, any mouthlike opening, such as the opening of the fallopian tubes;
- OSTI-ole, the opening of a conceptacle, perithecium, stoma, or another sac, or the inhalant aperture of a sponge

NOTE: don't confuse with Greek root OST- 'bone' of List 1.

# PAR-, PART- (pario → partum)

'to give birth to', 'to produce'

- MULTI-PAR-ous, bearing more than one offspring at a time;
- BI-PAR-ous, having two young at a time;
- RAMI-PAR-ous, producing branches.
- OCTI-PARA, a woman who has been in labour eight times

# PART- (pars, partis)

'part', 'to divide'

- PARTI-CIP-ate:
- PART-ic-ul-ar;
- BI-PART-ite, having two parts;
- DIGITI-PART-ite, having leaves divided in a hand-like pattern

# PAT- (patior)

'to spread or lie open'

- PAT-ent, open, exposed;
- pre-PAT-ent period, the period in parasitic disease between the introduction of the organism and its demonstration in the body

# PECTOR- (pectus, pectoris)

'breast', 'breastbone'

- PECTOR-al, pertaining to the chest, in the chest region;
- MEDIO-PECTOR-al, applies to the middle part of the sternum;
- ex-PECTOR-at-ion, ejection of material from the mouth

# PED- (pes, pedis)

'foot'

- PED-al;
- im-PEDE:
- ex-PED-ient;
- PEDI-cel, any slender stalk, especially one that supports a fruiting or spore-bearing organ;
- SCUTI-PED, having the foot or part of the foot covered by scutella

#### PELL- (pellis)

'skin'

• PELL-icle, a thin skin or film, such as a film on the surface of a liquid NOTE: don't confuse with PEL(L)- 'push' of List 10.

# PEND-, PENS- (pendo → pensus)

'to hang', 'to weigh', 'to pay'

- de-PEND;
- im-PEND;
- ex-PENS-ive;
- com-PENS-at-ion, a psychic phenomenon in which strong of guilt or inferiority prompt excessive defensive reactions

# PET-, PETIT- (peto → petitus)

'to seek'

- PET-it-ion:
- com-PET-it-ion;
- PET-ul-ant;
- RECTI-PET-al-ity, the tendency to rectilinear growth;
- ACRO-PET-al, ascending (applies to leaves, flowers or roots developing successively from an axis so that the youngest arise at the apex)

#### PIL- (pilus)

'hair'

- PIL-ose, hairy, downy;
- PILI-FER-ous, bearing or producing hair;
- PILI-MIC-at-ion, the passing of urine containing hairlike filaments

#### PISC- (piscis)

'fish'

- PISC-ine, of, relating to, having the characteristics of fish:
- PISCI-VOR-ous, fish-eating

# PLUM- (pluma)

'feather'

- PLUMI-GER-ous, feathered;
- PULVI-PLUME, a powder-down feather

#### PRED- (praeda)

'prey'

- PRED-at-ism, the habit or practice of living by predation;
- PRED-acious, preying on other animals;
- PRED-ac-ity, quality or state of being predacious

# PRESS- (premo → pressus)

'to press'

- de-PRESS-ion,
- im-PRESS-ion,
- re-PRESS,
- op-PRESS-ion;
- de-PRESSO-MOT-or, any nerve which lowers muscular activity

# **PROPRI-** (proprius)

'one's own'

- ap-PROPRI-ate;
- ex-PROPRI-ate;
- im-PROPRI-ety;
- PROPRIO-SPIN-al, pertaining wholly to the spinal cord (applies to fibres)

#### RACEM- (racemus)

'cluster of grapes or berries'

- RACEM-ose, arranged in a cluster, or bearing flowers in clusters;
- RACEM-ic acid, named from its being found in the juice of grapes

#### RIM- (rima)

'crack', 'chink'

- RIM-ate, having fissures;
- RIM-iform, in the shape of a narrow fissure:
- BI-RIM-ose, having two clefts or slits

# ROD-, ROS- $(rodo \rightarrow rosum)$

'to gnaw'

- ROD-ent;
- cor-ROS-ive, a substance which destroys organic tissue by chemical means or by inflammation;
- e-ROS-ion, an eating, gnawing or wearing away

#### ROT- (rota)

'wheel'

- ROT-ate, shaped like a wheel, rotiform;
- ROT-ul-iform, shaped like a small wheel;
- MUTA-ROT-at-ion, a change in optical rotation of solutions of certain sugars

# SALI- (-SILI-), SALT- (-SULT-) (salio; saltus)

'to leap', 'to jump'

- ex-ULT;
- re-SULT:
- con-SULT;
- in-SULT, trauma or other stress to tissues or organs;
- SALTI-GRADE, moving by leaps as some insects

#### SEB- (sebum)

'grease', 'tallow'

- SEBUM, the oily secretion of the SEB-aceous glands which lubricates and protects the hair and skin;
- SEBO-RRHEA, a disease of the sebaceous glands, characterized by an excessive secretion or disturbed quality of sebum

# SEC-, SEG-, SECT- (seco → sectus)

'to cut'

- in-SECT:
- re-SECT-ion, the operation of cutting out as the removal of a segment or section of an organ;
- SECT-or-ial, formed or adapted for cutting, as certain teeth

#### SED- (-SID-), SESS- (sedo; sessus)

'to sit', 'to settle'

- re-SIDE;
- pre-SID-ent;
- SESS-ion;
- in-SESS-or-ial, adapted for perching;
- re-SID-ual, pertaining to that which cannot be evacuated or discharged (as residual air in the lungs, residual urine in the bladder)

# SENS-, SENT- (sentio → sensum)

'to feel', 'to perceive'

- SENT-ence;
- con-SENT;
- as-SENT;
- dis-SENT;
- SENS-ile, capable of affecting a sense:
- SENTI-ent, of cells that are sensitive and perceptive;
- SENS-illa, a small sense organ

#### **SET-** (seta)

'bristle'

- SETA, any bristle-like structure, as the sporophore of liverworts and mosses;
- SETI-GER, a segment or process bearing bristles

#### SOL- (sol, solis)

'sun'

- SOL-arium;
- in-SOL-at-ion, exposure to the sun's rays;
- SOL-ASTER-idae, a family of starfishes, typically brightly coloured and having numerous arms

#### **SOMN-** (somnus)

'sleep'

- SOMNI-FACI-ent, a medicine producing sleep, a hypnotic;
- SOMNI-FUG-ous, driving away sleep;
- hyper-SOMN-ia, excessive sleepiness

#### **SORB-, SORPT-** (sorbeo)

'to suck in'

 ab-SORPT-ion, in physiology, the taking up of fluids or gases through osmosis and capillarity, or infiltration into the skin, or incorporation into the body through blood and lymph

### **SQUAM-** (*squama*)

'scale'

- SQUAMI-FER-ous, bearing scales;
- e-SQUAM-ate, having no scales;
- SQUAM-ul-ate, having minute scales

# STRING-, STRICT- (stringo → strictus)

'to draw tight'

- STRICT, stiffly upright, rigid, erect;
- a-STRING-ent, an agent that produces contraction of organic tissues or arrests haemorrhage, diarrhea, etc.

#### TEN- (-TIN-), TENT- (teneo → tentus)

'to hold'

- TEN-ant;
- con-TIN-uous;
- de-TENT-ion;
- in-con-TIN-ent, not having the ability to control the natural evacuations, as the faeces or urine;
- sus-TIN-acul-ar, supporting (applies to connective tissue acting as a supporting framework for an organ

NOTE: this one can look like some of the forms of TEND- 'stretch' of List 10.

#### TER(R)- (terra)

'earth'

- TERR-aneous, applies to land vegetation;
- TERRI-COL-ous, living in the earth NOTE: not to be confused with TER- '3' of List 10.

# TRACT- (traho → tractus)

'to draw', 'to drag'

- TRACT-or;
- at-TRACT-ive;
- dis-TRACT-ile, widely separate (usually applies to long-stalked anthers);
- CEPHALO-TRACT-or, obstetric forceps

#### TUBER- (tuber)

'swelling'

- TUBER, a thickened, fleshy underground stem with surface buds;
- TUBER-iform, resembling or shaped like a tuber;
- TUBER-in, a simple protein of the globular type which occurs in potatoes

# UTER- (uterus)

'womb'

- UTER-ismus, uterine contraction of a spasmodic and painful character;
- UTERO-GEST-at-ion, the part of the gestation period passed in the uterus;
- UTRI-cle or UTRI-culus, an air bladder of aquatic plants, or the membranous sac of the ear labyrinth

#### VACU- (vacuus)

#### 'empty'

- VACUUM;
- VACU-ole, one of the spaces in cell protoplasm containing air, sap or partially digested food;
- VACU-ol-is-at-ion, the formation of vacuoles

#### VAS- (vas)

#### 'vessel'

- VASE:
- VAS-cul-ar, consisting of or containing vessels adapted for transmission or circulation of fluid;
- CARDIO-VAS-cul-ar, pertaining to the heart and blood vessels;
- VASO-di-LAT-ion, relaxing or enlarging the vessels

# VEH-, VECT- (veho → vectus)

#### 'to carry'

- ad-VEH-ent, afferent, carrying to an organ;
- con-VECT-ion, a transmission or carrying, as of heat;
- VECT-or

#### VIT- (vita)

#### 'life'

- VIT-al, pertaining to or necessary for life;
- AQUA VITAE, spirit or eau-de-vie

# VIV- (vivus)

# 'living'

- sur-VIVE; VIV-id;
- VIV-acious;
- VIVI-dif-FUS-ion, passage of diffusible substances from the blood of a living animal;
- VIV-PAR-ous, bringing forth the young alive

# VOR- (voro)

#### 'to eat'

- VOR-acious;
- HERBI-VOR-ous, living on vegetable food;
- FUNGI-VOR-ous, fungus-eating animals and plants;
- in-SECTI-VOR-ous, living on insects

# Vocabulary List 9

# **Latin Verb-Forming Suffixes**

#### -ate (-atus)

'to make', 'to treat', 'to do something with'

• alleviate, obviate, illuminate

NOTE: This suffix often combines with the suffix -ion to form a noun (e.g. illumination = "the act of making/bringing in light")

# -fy (-ficere)

'to make', 'to cause'

• terrify, liquify, pacify

NOTE: The adjective ending that corresponds to -fy is -fic, 'making', 'causing' (e.g. terrific, pacific)

# -igate, -egate (-atus)

'to make', 'to drive'

• mitigate, fumigate, navigate, variegate

# -esce (-escere)

'to begin', 'to be somewhat'

• effervescent, convalescent, arborescent

# **Latin Roots IV**

### AG-, ACT- (ago → actus)

'to do', 'to drive', 'to act'

- ACT-ion;
- AG-ile;
- CUTI-re-ACT-ion, a local skin reaction following inoculation with or the application of extracts of pathogenic organisms

#### ALB- (albus)

'white'

- ALBI-FACT-ion, the act or process of blanching or rendering white;
- ALBUM-in, a protein substance found in nearly every animal and some vegetable tissue;
- ALBUR-num, sapwood or splint wood (i.e., the soft, white substance between the inner bark and true wood)

#### ARC(U)- (arcus)

'bow', 'arch'

- ARC-ade;
- ARCI-FER-ous, applies to the pectoral arch of toads;
- ARC-iform, shaped like an arch or a bow;
- ARCU-alia, small, cartilaginous pieces, dorsal and central, fused or free, on the vertebral column of fishes

#### CALCAR- (calcar)

'spur'

- CALCAR-ine, a fissure extending to the hypocampal gyrus on the medial surface of the cerebral hemisphere;
- CALCAR-ate, having a spur or spurlike point

NOTE don't confuse with the root CALC-'limestone' and CALC- 'heel' of Lists 8 and 10.

#### CAUL- (caulis)

'stem', 'stalk'

- CAULI-COL-ous, applies to fungi growing on plant stems;
- CAUL-ine, pertaining to a stem (applies to leaves growing on the upper portion of a stem;
- FILI-CAUL-ine, with a threadlike stem

#### CAV- (cavus)

'hollow'

- CAVI-CORN, hollow-horned;
- inter-CAV-it-ary, within a CAV-ity

#### CER- (cera)

'wax'

- CERI-FER-ous, wax-bearing, waxy;
- CERE-ous, waxy

#### CING-, CINCT- (cingo → cinctus)

'to bind', 'to gird'

- pre-CINCT;
- suc-CINCT;
- CING-ulum, a girdle or the waist;
- sub-CING-ulum, the lower lip part of the cingulum of rotifers;
- CING-ul-ectomy, the surgical removal of the cingulate gyrus (in the brain)

#### CLIV- (clivus)

'slope'

- pro-CLIV-ity;
- de-CLIVE, a lower or descending part;
- CLIVUS, a slope;
- post-CLIV-al, the fissure behind the clivus of the cerebellum

# COCT- (coquo → coctus)

'to cook', 'to boil'

- con-COCT-ion, preparation made by combining different crude ingredients;
- COCTO-STA-ble, able to withstand the temperature of boiling water without change

# CUSP-, CUSPID- (cuspis, cuspidis)

'point'

 CUSP, a pocket or fold in the wall of the heart or a major blood vessel that fills and distends if the blood flows backwards, so forming part of a valve; a cone-shaped prominence on the surface of a tooth; a sharp rigid point of a leaf; bicuspid, having two cusps or points; a tooth with two cusps, especially a human premolar tooth; • bi-CUSP-id, having two cusps, as bicuspid teeth, or as the mitral valve of the heart

# CUT-, CUSS- (-cutio →-cussus)

'to shake', 'to strike'

- con-CUSS-ion, shock, the state of being shaken, a severe shaking or jarring of a part;
- per-CUSS-ion, the act of firmly tapping the surface of the body with a finger or a small hammer to elicit sounds or vibratory sensations of diagnostic value

NOTE: not to be confused with the homonymous CUT- 'skin' of List 8.

#### DOL- (doleo)

'to feel pain', 'to cause pain'

- con-DOL-ence;
- in-DOL-ent, sluggish, usually applied to slowness in healing or growing, as an indolent ulcer, or causing little or no pain, as an indolent tumour

#### EBURN- (ebur; eburnus)

'ivory'

- EBURN-eous, ivory white, white more or less tinged with yellow;
- EBURN-itis, increased hardness and density of the tooth enamel

#### FASCI- (fascia)

'band'

- FASCIA, thin sheath of fibrous tissue enclosing a muscle or organ;
- FASCI-ated, showing abnormal fusion of parts or organs, resulting in a flattened ribbon-like structure;
- FASCI-ola, a narrow colour-band;
- FASC-itis, inflammation of a fascia

#### **FENESTR-** (fenestra)

'window', 'opening'

- FENESTR-ate, having small perforations or transparent spots (applies to insect wings);
- CRANIO-FENESTR-ia, congenital bony defect involving the total thickness of the skull, lacuna skull

### FERR- (ferrum)

'iron'

- FERR-ic, relating to iron;
- FERR-ule, a ring or cap, typically a metal one, which strengthens the end of a handle, stick, or tube and prevents it from splitting or wearing;
- FERR-ous, containing or consisting of iron;
- FERRI-HAEMO-GLOB-in, haemoglobin in which the iron is normally in a ferrous state

NOTE: not to be confused with the similar FER- 'to bear' of List 6.

#### FIL- (filum)

'thread'

- FILI-GER-ous, with threadlike outgrowths or flagella;
- FIL-ar-iasis, a diseased state due to the presence of nematode worms of the super family Filarioidea

# FLAGELL- (flagellum)

'whip', 'whip-like appendage'

- FLAGELL-ate;
- FLAGELL-um, a slender thread-like structure, especially a microscopic whip-like appendage which enables many protozoa, bacteria, spermatozoa, etc. to swim;
- FLAGELL-in, the structural protein of bacterial flagella

#### FLAV- (flavus)

'yellow'

- FLAV-edo, yellowness of the skin;
- FLAV-in, one of a group of yellow pigments isolated from various plant and animal sources

# FLOCC- (floccus)

'tuft, as of wool'

- FLOCCUS, a tuft of wooly hairs on a plant;
- FLOCC-ose, covered with woollike tufts (applies to bacterial growths)

#### FOR- (foro)

'to bore', 'to pierce'

- FOR-amen, the opening through the coats of an ovule, or any small perforation;
- FOR-amin-ule, a minute foramen;
- FOR-amini-FER-a, an order of protozoans with calcareous shells with minute openings for pseudopodia

# FOV- (fovea)

'pit'

- FOVEA, a small pit, fossa or depression, or a small hollow at leaf base;
- FOVE-ate, pitted;
- FOVE-ol-ate, having regular, small depressions

#### **FUNG-** (fungus)

'mushroom', 'fungus'

- FUNGI-VOR-ous, fungus-eating animals and plants;
- FUNG-at-ion, the act of growing up rapidly, like a fungus (as certain pathologic growths);
- FUNG-os-ity, fungous excrescence, fungous quality

# GLABR- (glaber, glabris)

'hairless', 'smooth'

- GLABR-ous, free from hair or down, smooth (chiefly of the skin or a leaf);
- GLAB-ella, the smooth part of the forehead above and between the eyebrows

#### GLOMER- (glomus, glomeris)

'ball of yarn'

- GLOMUS, a fold of the mesothelium containing a ball of blood vessels;
- con-GLOMER-ation, that which is made up of parts from various sources

#### **GLUTIN-** (gluten, glutinis)

'glue'

- GLUTEN, a mixture of proteins found in the seeds of cereals, which confers the property of toughness to dough;
- GLUTIN-ous, viscid, gluelike

# HAL-, HALIT- (halo; halitus)

'to breathe'

- HALIT-us, a vapour, as that expired by the lungs;
- HALIT-osis, the state of having offensive breath

NOTE: not to be confused with Greek root HAL-'salt' of List 5

#### HI-, HIAT- (hio → hiatus)

'to stand open'

- HIAT-us, a space or opening;
- de-HI-sc-ence, the spontaneous opening of an organ or structure along certain lines in a definite direction;
- in-de-HI-sc-ent, not splitting at maturity (applies to certain fruits)

# I-, IT- $(eo \rightarrow itus)$

'to go'

- in-IT-ial;
- ex-IT;
- ob-IT-uary;
- amb-IT-us, the outer edge or margin or the outline of an echinoid shell viewed from the apical pole;
- ab-I-ent, tending away from the source of stimulus (opp. ad-I-ent)

#### LABI-, LABR- (labium or labrum)

'lip'

- LABIUM, lip, liplike structure;
- LABIO-GRESS-ion, location of the anterior teeth in front of their normal position

NOTE: careful not to confuse with similar LAB-'fall' of List 7

#### LAMIN- (LAMELL-) (lamina)

'thin plate'; 'little plate' (*lamella*), diminutive form.

- LAMIN-ate;
- LAMELLA, a plate or layer;
- LAMELLI-CORN, having antenna joints expanded into flattened plates;
- LAMIN-ectomy, surgical removal of one or more neural laminas of the vertebrae

#### LAT- (latus)

'broad', 'wide'

- di-LAT-ion;
- LATI-SQUAM-ate, broad-scaled NOTE: don't confuse with below.

# LAT- $(fero \rightarrow latus)$

'to bear', 'to carry'

- re-LATE;
- e-LAT-ed:
- trans-LATE;
- ab-LAT-ion, removal of a part by amputation, excision, etc.

NOTE: don't confuse with above.

#### LEV- (levis)

'light' (in weight)

- LEV-ity;
- LEV-er:
- e-LEV-at-or, an instrument for lifting a part or for extracting the roots of teeth;
- al-LEVI-at-ion, the modification of symptoms, the lessening of pain

NOTE: don't confuse with homonymous LEV- 'left' of List 8.

#### LIEN- (lien)

'spleen'

- LIEN-al, pertaining to the spleen (applies to an artery, vein, or nerve plexus);
- GASTRO-LIEN-al, pertaining to the stomach and spleen

#### LIG- (ligo)

'to bind'

- ob-LIG-at-ion;
- al-LIG-at-or;
- LIG-ament, a band of tough, flexible connective tissue;
- LIG-at-ure, a cord or thread for tying vessels or the act of tying or binding

#### LIGN- (lignum)

'wood'

- LIGNE-ous, woody, of the nature of wood;
- LIGN-in, a complex substance which, associated with cellulose, causes the thickening of plant cell walls, and so forms wood

#### LIQU- (liquo)

'to be liquid'

• LIQUE-FACT-ion, conversion of material into liquid form

#### LONG- (longus)

'long'

- LONGI-tude;
- LONGI-CORN, having long antennae, former term for longhorn beetle:
- LONGI-MAN-ous, long-handed

#### LUMIN- (lumen, luminis)

#### 'light'

- LUMEN, the cavity of a tubular part of an organ, or the central cavity of a plant cell;
- SONO-LUMIN-esc-ence, the emission of light by various liquids when traversed by high-frequency sound or ultrasonic waves

#### MAN(U)- (manus)

#### 'hand'

- MANU-FACT-ure,
- MANU-SCRIPT;
- BI-MAN-ous, having two hands (applies to certain primates);
- MANU-DUCT-ion, operation performed by the hands in surgical and obstetric practice

#### MEAT- (meo → meatus)

'to go', 'to pass'

- MEATUS, an opening or passage;
- MEAT-itis, inflammation of the wall of a meatus;
- SUPRA-MEAT-al, applies to triangle and spine over external acoustic meatus

#### MIT(T)-, MIS(S)- (mitto $\rightarrow$ missus)

'to send', 'to let go'

- e-MISS-ary, any venous channel through the skull connecting the venous sinuses with the diploic veins and veins of the scalp;
- intro-MISS-ion, insertion, the act of putting in, the introduction of one body into another

NOTE: not to be confused with the Greek roots MIT-'thread' or MIS- 'hate' of Lists 4 and 3.

#### MUC- (mucus)

#### 'mucus'

- MUCI-fic, mucus-secreting;
- MUCO-CUT-aneous, pertaining to skin and mucous membrane

#### NAS- (nasus)

'nose'

- NAS-al;
- NAS-al-ize;
- NASO-GASTR-ic, reaching or supplying the stomach via the nose;
- NASO-PHARYNX, the upper part of the pharynx, connecting with the nasal cavity above the soft palate

#### NIGR- (niger, nigeris)

'black'

• NIGR-esc-ent, nearly black, blackish NOTE: This root was widely used to describe neutrally the colour black (as it did in Latin). But because the root in modern history has sinisterly been most used to form the base of an offensive ethnic slur, its pronunciation is now important to distinguish it. It is now common to pronounce this root like in Latin, with the 'i' = 'eeee' sound or turning the 'i' into an 'eye' sound.

#### NUC- (nux, nucis)

#### 'nut'

- NUC-leus;
- NUC-le-ase, an enzyme that cleaves the chains of nucleotides in nucleic acids into smaller units;
- NUC-ellus, the central part of an ovule, containing the embryo sac;
- NUC-le-olus, a small dense spherical structure in the nucleus of a cell during interphase.

#### NUTRI-, NUTRIT- (nutria → nutritus)

'to nourish'

- NUTRIC-ism, a relationship of two animals with all the benefit to one partment;
- NUTRI-ent, that which affords nutrition

#### OS-, OR- (os, oris)

'mouth'

- OR-al;
- OS-culum, a large aperture in a sponge through which water is expelled;
- OS-CUL-ate, to kiss;
- OS-CUL-ar, relating to kissing (or to an osculum)

NOTE: don't confuse with OSS- below.

#### OSS- (os, ossis)

'bone'

- OSS-icle, any small bone;
- DERMO-OSSI-FIC-at-ion, a bone formed in the skin

NOTE: don't confuse with OS- above.

#### PALLI- (pallium)

'mantle', 'covering'

- PALLI-um, (in zoology) the mantle of a mollusc or brachiopod, (in anatomy) the outer wall of the mammalian cerebrum, corresponding to the cerebral cortex:
- PALLI-ate, to make (a disease or its symptoms) less severe without removing the cause;
- PALLI-at-ive, relieving pain without dealing with the cause of the condition

#### PALP- (palpo)

'to touch', 'to stroke'

- im-PALP-able, not capable of being felt, imperceptible to touch;
- PALP-it-at-ion, any heart action of which the patient is conscious
- PALPO-CIL, a stiff, sensory filament attached to sense cells of Hydromedusae

# PLEX- $(plecto \rightarrow plexus)$

'to interweave', 'to braid'

- PLEXUS, a network of interlacing nerves or anastomosing blood vessels or lymphatics;
- PLEX-iform, resembling a plexus or network;
- PLEX-ODONT, having molar teeth with complicated crown patterns and multiple roots

NOTE: don't confuse with Greek root PLEX- 'strike' of List 1

#### PRON- (pronus)

'inclined', 'face-down'

- Prone, lying flat, especially face downwards
- PRON-ator, a muscle whose contraction produces or assists in the pronation of a limb or part of a limb.

#### **PROXIM-** (proximus)

'near', 'nearest'; 'nearest the body')

- PROXIM-ate, nearest, immediate (as proximate cause);
- PROXIM-al, in dentistry, surface of a tooth next to the adjacent tooth;
- PROXIMO-LABI-al, pertaining to a tooth's proximal and labial surfaces

#### PUNG-, PUNCT- (pungo → punctus)

'to prick', 'point'

- com-PUNCT-ion;
- PUNCT-uate;
- PUNCT-il-ious;
- PUNCT-iform, having the nature of qualities of a point, or seeming to be located at a point (of a sensation), or in bacteriology, very minute colonies:
- PUNG-ent, ending in a rigid and sharp point

#### RIG- (rigeo)

'to be stiff'

- RIG-id, stiff or hard;
- RIG-esc-ent, becoming rigid;
- RIGID-itas, stiffness, rigidity

#### RUB(R)- (ruber)

'red'

- BILI-RUBR-in, a reddish-yellow pigment of bile and blood;
- RUBIGIN-ose, of a brownish-red tint, rust-coloured;
- e-RUB-esc-ent, blushing red

#### SAC(C)- (saccus)

'bag', 'sac'

- SACC-ate, dilated to form a sac;
- SACC-ule (SACC-ulus), a small sac, pouch, or cyst

#### SCRIB-, SCRIPT- (scribe → scriptus)

'to write'

- de-SCRIBE;
- pre-SCRIBE;
- sub-SCRIBE;
- circum-SCRIPT, a marginal sphincter when sharply defined, as in sea anemones

#### SEP-, SEPT- (septum)

'to separate', 'wall'

- SEPTUM, a partition, a dividing wall between two spaces or cavities;
- e-SEPT-ate, not supplied with septa;
- SEPT-ectomy, excision of part of the nasal septum

NOTE: don't confuse with Greek root SEP- 'rot' of List 4 or the Latin SEPT- '7' of List 10.

#### **SINISTR-** (sinister)

'left'

- SINISTER:
- SINISTRO-TORS-ion, a twisting or turning toward the left;
- SINISTR-in, a levorotatory polysaccharide

#### SIN(U)- (sinus)

'curve', 'hollow', 'cavity'

- in-SINU-ate, suggest or hint in an indirect and unpleasant way;
- SINUS, a cavity within a bone or other tissue, especially one in the bones of the face or skull connecting with the nasal cavities;
- SINU-ate, having a wavy or sinuous margin; with alternate rounded notches and lobes;
- SINU-ous, having many curves and turns;
- SINUS-oid, a small irregularly shaped blood vessel found in certain organs, especially the liver

# SPIN- (spina)

'thorn', 'spine'

- SPIN-ul-ate, covered with spines;
- SPIN-ul-at-ion, a defensive spiny covering, or the state of being spinulate

#### SPIR- (spiro)

'to breathe'

- SPIRIT;
- con-SPIRE;
- a-SPIR-at-or, a negative pressure apparatus for withdrawing liquids from cavities;
- su-SPIR-at-ion, a sigh, the act of sighing;
- tran-SPIR-at-ion, exhalation of vapour through pores or stomata

NOTE: don't confuse with Greek root SPIR- 'coil' of List 5

# STA-, STAT- (sto → stare, status)

'to stand'

- circumstance;
- distant;
- extant;
- instant;
- status;
- substance;
- STA-ble, not liable to undergo chemical decomposition, radioactive decay, or other physical change; STA-bile, stationary;
- DI-ST-al, situated away from the centre of the body or from the point of attachment

NOTE: Very similar to the Greek root STA- "stand" of List 2.

#### STIP-, STIPIT- (stipes, stipitis)

'stalk'

- STIPIT-ate, stalked;
- STIP-ule, one of two membranes or foliaceous processes developed at the base of a leaf petiole;
- BI-STIP-ul-ate, provided with two stipules

#### **STRAT-** (*stratum*)

'layer'

- BI-STRAT-ose, with cells arranged in two layers;
- STRAT-iform, applies to fibrocartilage coating osseous grooves

#### STRU-, STRUCT- (struo → structus)

'to construct', 'to build'

- STRUCT-ure;
- de-STRUCT-ion;
- ob-STRU-ent, obstructing, tending to obstruct

#### **TERMIN-** (terminus)

'end', 'boundary'

- ab-TERMIN-al, going from the end inward:
- at-TERMIN-al, toward the terminal;
- co-TERMIN-ous, having the same or coincident boundaries

#### TUM- (tumeo)

'to swell'

- TUM-esc-ent, swollen, enlarged;
- de-TUM-esc-ence, subsidence of a swelling (esp. of erecto-sexual organs following orgasm)

#### UMBR- (umbra)

'shade', 'shadow'

- UMBR-age;
- ad-UMBR-ate;
- ex-UMBR-al, pertaining to the rounded upper surface of a jellyfish;
- ob-UMBR-ate, with some structure overhanging the parts so as partially to conceal them;
- UMBR-aculum, any umbrellalike structure

#### **UNGU-** (unguis)

'nail' (of finger or toe)

- UNGUI-FER-ate, having nails, claws or hooklike processes;
- UNGUI-cul-ata, Mammalia with nails or claws as distinguished from hoofed mammals and cetaceans

#### VEL- (velum)

'veil', 'covering'

- VELUM, a membrane or structure similar to a veil;
- VELI-GER, second stage in larval life of certain molluscs when the head bears a velum

NOTE: not to be confused with VELL- 'tear' of List 10.

#### **VISCER-** (viscus)

'entrails'

- e-VISCER-at-ion, removal of internal organs;
- VISCERO-SENS-ory, relating to sensation in the viscera

#### VITR- (vitrum)

'glass'

• VITR-eous, like glass in appearance;

#### **VARI-** (varius)

'varied', 'changing', 'spotting'

- VARI-ous;
- VARI-ety;
- VARI-egate-d, marked with different colours;
- VARI-CELLA, chickenpox

#### **VENTR-** (venter)

'belly'

- VENTRI-LOQU-ism; V
- ENTR-icle, a cavity or chamber, as of the heart or brain:
- BI-VENTR-al, applies to muscles of the biventer type (= digastric, each of a pair of muscles which run under the jaw and act to open it, from GAST- 'belly' because the muscle has two fleshy parts or 'bellies' at an angle, connected by a tendon)
- VITR-esc-ent, capable of or susceptible to being turned into glass;
- VITR-eous HUM-our, the transparent jelly-like tissue filling the eyeball behind the lens (cf. aqueous humour);
- VITR-ectomy, the surgical operation of removing the vitreous humour from the eyeball

#### VOLV-, VOLUT- ( $volvo \rightarrow volutus$ )

'to roll', 'to turn'

- in-VOLVE;
- re-VOLUT-ion;
- VOLUTE:
- ob-VOLUTE, bent downward and inward (applies to wings, elytra of insects);
- VOLV-ulus, a twisting of the bowel upon itself occluding the lumen.

# Vocabulary List 10

# **Latin Numeral Roots**

# **SEMI-** (semis)

'half', 'partly'

- SEMI-LUN-ate, half-moon-shaped;
- SEMI-CAUD-ate, with a rudimentary tail

#### UN- (unus)

'one'

- UN-ique;
- UN-iform;
- UN-ANIM-ity;
- UNI-FOLI-ate, with one leaf;
- UNI-PAR-ous, producing one offspring at a birth;
- UNI-STRATE, having only one layer

#### PRIM- (primus)

'first'

- PRIM-ary;
- PRIM-ates, the highest order of the vertebrate class Mammalia, including man, apes, monkeys and lemurs;
- PRIMI-PAR-ous, pertaining to a woman bearing or giving birth to her first child

#### SESQUI- (sesqui)

'one-and-a-half times'

- SESQUI-CENT-ENNI-ial;
- SEQUI-CHLOR-ide, a compound of chlorine and another element containing three parts of chlorine and two of the other element:

SESQUI-OX-ide

#### DU- (duo)

'two'

- DU-et; DU-al;
- DU-PLIC-ate;
- DU-PLICI-DENT, with two pairs of incisors in the upper jaw;

#### BI-, BIN- (bi-)

'two', 'twice'

- BI-NATE, growing in pairs;
- BI-FID, forked, opening with a median cleft;
- BI-STRAT-ose, with cells arranged in two layers

#### **SECOND-, SECUND-** (secundus)

'second', 'following'

- SECOND-ary;
- SECUNDI-GRAV-ida, a woman pregnant the second time

# TRI- (tres, tria)

'three'

- TRI-DENT;
- TRI-VI-al;
- TRI-COST-ate, with three ribs;
- TRI-FID, cleft to form three lobes

#### TERTI- (tertius)

'third'

- TERTI-ary, third, pertaining to third stage of disease;
- TERT-ian, recurring every other day, as a tertian fever

#### TERN- (terni)

'three each'

 TERN-ary, consisting of or based on three, or pertaining to a crystal system in which three-sided forms occur, or an alloy with three elements:

#### TER- (ter)

'three times'

• TER-VAL-ent, having a valence of three, triple

NOTE: not to be confused with TER(R)- 'earth' of List 8.

#### **QUADR(U)-** (quadrus)

'four'

- QUADRU-PLE; QUADRI-JUG-ate, applies to pinnate lear having four pairs of leaflets;
- QUADRU-PED, a four-footed animal

#### **QUART-** (quartus)

'fourth'

 QUART-an, recurring every three days (or four, counting inclusively), as on first, fourth and seventh day;

# **QUATERN-** (quarter)

'four each'

 QUATERN-ate, in sets of four (applies to leaves growing in fours from one point

#### **QUINQUE-** (quinque)

'five'

• QUINQUE-PART-ite, divided into five parts

#### **QUINT-** (quintus)

'fifth'

• QUIN-ary, applies to flower symmetry in which there are five parts to a whorl;

# QUIN- (quin)

'five each'

• QUINTU-PL-et, one of five children born at one birth

#### SEX-(sex)

'six'

• SEX-OSTI-atae, group of spiders marked by six cardiac ostia

#### **SEXT-** (sextus)

'sixth'

• SEXT-ant, a maximum angle of sixty degrees;

# SEPT-, SEPTEM- (septem)

'seven'

- SEPTEM-ber:
- SEPTEM-PART-ite, divided into seven parts;

NOTE: don't confuse with Greek root SEP- 'rot' of List 4 or the Latin SEPT- 'separate' of List 9.

#### **SEPTIM-** (septimus)

'seventh'

SEPTIM-al, based on the number seven

#### OCT- (octo)

'eight'

- OCTO-RADI-ate, having eight rays or arms;
- OCT-ane, the eighth member of the paraffin or marsh gas series

#### OCTAV- (octavus)

'eighth'

• OCTAV-e

#### NOVEM- (novem)

'nine'

NOVEM-ber;

#### NON- (nonus)

'ninth'

- NON-illion, ten to the thirtieth power;
- NON-an, having an exacerbation every ninth day

#### **DECEM-** (decem)

'ten';

• DECEM-FID, cleft into ten parts

#### **DEC-, DECIM-** (decimus)

'tenth'

- DECIM-ate;
  - DECI-LITRE, one-tenth of a litre;

#### CENT- (centum)

'hundred', 'hundredth'

- CEN-ENN-ial;
- CENT-uri-on;
- CENTI-PEDE, elongated segmented arthropods with many legs;
- CENTI-metre, one-hundredth of a metre

NOTE: not to be confused with the similar Greek root CENTE- 'puncture' of List 3

#### MIL(L)- (mille)

'thousand', 'thousandth'

- MILL-ENN-ium;
- MILLI-PEDE, myriopods constituting the the class Diplopoda having numerous segments and legs;
- MILLI-metre, one-thousandth of a metre

# **Latin Roots V**

#### **ALVEOL-** (alveolus)

'cavity', 'hollow'

- ALVEOL-ar, relating to an alveolus;
- ALVEOL-us, a small cavity, pit, or hollow, in particular: any of the many tiny air sacs of the lungs which allow for rapid gaseous exchange; the bony socket for the root of a tooth; an acinus (sac-like cavity) in a gland;
- ALVEOL-ation, the formation of alveoli

#### ATRI- (atrium)

'entrance hall', 'room'

- ATRI-um, each of the two upper cavities of the heart from which blood is passed to the ventricles;
- ATRIO-VENTR-icular, relating to the atrial and ventricular chambers of the heart, or the connection or coordination between them

#### AX- (axis)

'axis'

- AX-ial, relating to or forming an axis;
- AB-AX-ial, facing away from the stem of a plant (in particular denoting the lower surface of a leaf);
- AD-AX-ial, facing towards the stem of a plant (in particular denoting the upper surface of a leaf);
- AXO-POD-ium, a pseudopodium with axial filament

#### BARB- (barba)

'beard'

- barber:
- BARB-ule, a minute filament projecting from the barb of a feather;
- BARB-ate, bearded;
- BARBI-cel, a small process on a feather barbule

NOTE: this is not the root for "barbarian" which comes from Greek and is unrelated to the 'beard' meaning. Instead, "barbarian" is from the Greek  $\beta\dot{\alpha}\rho\beta\alpha\rho\sigma\varsigma$ , which means "those who speak gibberish" ("bar bar bar" is Greek for our "blah blah blah")."

#### BIL- (bilis)

'bile'

- BILI-ous, affected by or associated with nausea or vomiting;
- BILI-RUB-in, an orange-yellow pigment formed in the liver by the breakdown of haemoglobin and excreted in bile;
- BILI-VERD-in, a green pigment excreted in bile (the oxidized derivative of bilirubin);
- BILI-ary, relating to bile or the bile duct.

#### **BRACT(E)-** (*bractea*)

'thin plate'

- BRACT, a modified leaf or scale, typically small, with a flower or flower cluster in its axil;
- BRACTE-ate, having or bearing bracts:
- BRACTE-ole, a small bract, esp. one on a floral stem

#### BURS- (bursa)

'bag', 'pouch'

- bursary; bursar; disburse; reimburse;
- BURSA, a fluid-filled sac or sac-like cavity, especially one countering friction at a joint;
- BURS-itis, inflammation of a bursa, typically one in a shoulder joint;
- BURS-icle, a pouch-like receptacle

# CALC-, CALCANE- (calx, calcis; calcaneus)

'heel'

- CALC-aneus (pl. calcanei), the large bone forming the heel;
- CALC-aneal, pertaining to the heel bone;
- CALC-aneo-CAVUS, a type of talipes (a deformity of the foot)

NOTE: Not to be confused with CALC- 'limestone' or CALCAR- 'spur.' This root is related to CALCAR-, as the 'heel' is used to 'spur' on a horse.

#### CAN-, CAND- (canus; candidus)

'white', 'grey'; 'to be glowing white'

- candid;
- candidate;
- candour:
- in-CAND-esc-ent, emitting light as a result of being heated;
- CAN-ities, greyness or whiteness of the hair

NOTE: Not to be confused with the homonymous CAN- 'dog' of List 7.

#### **CERVIC-** (*cervix*, *cervicis*)

'neck'

• CERVIC-al, relating to the narrow neck-like passage forming the lower end of the womb (or simply relating to the neck);

- CERVIC-itis, inflammation of the neck of the womb;
- CERVICO-BRACHI-ALG-ia, condition in which pain extends from the cervical region to arms or fingers

#### CLAV- (clava)

'club'

- CLAV-ate or CLAV-iform, clubshaped; thicker at the apex than the base;
- ob-CLAV-ate, club-shaped and attached at the thicker end

NOTE: not to be confused with the homonymous CLAV- 'key'

#### CLAV- (clavis)

'key', 'bolt', 'collarbone'

- enclave;
- exclave:
- clavichord:
- CLAV-icle, the collarbone;
- sub-CLAV-ian, under the clavicle;
- CLAVIC-ular, pertaining to the clavicle

NOTE: not to be confused with the homonymous CLAV- 'club'

#### CLIN- (KLIN-) (clinatus)

'to slope', 'to lean'

- incline;
- decline;
- CLINO-CEPHA-ly, congenital flatness or concavity of the vertex of the head;
- syn-CLINE, a trough or fold of stratified rock in which the strata slope upwards from the axis

NOTE: The verbal meaning of this root only exists in compound forms in Latin (inclinere, declinere). It is taken from the Greek KLIN- ( $\kappa\lambda\nu\tilde{\omega}$ ), but the 'K' is not used often today.

# CORP-, CORPUS-, CORPOR- (corpus, corporis)

'body'

- CORPOR-al;
- in-CORPOR-al;
- CORPS;
- in-CORPOR-ate;
- CORPUS-cle, a minute body or cell in an organism, especially a red or white cell in the blood of vertebrates

#### COX- (coxa)

'hip', 'hip joint'

- COXA, (in anatomy) the hip bone or hip joint; (in entomology) the first or basal segment of the leg of an insect);
- COX-ALG-ia, pain in the hip joint;
- EPI-COX-ite, a small process at the end of the toothed part of the coxa in insects

#### CREN- (crena)

'notch'

- CREN-ate, having a round-toothed or scalloped edge (especially of a leaf or shell);
- CREN-ul-ate, having a finely scalloped or notched outline or edge (especially of a leaf, shell, or shoreline)

#### EGO- (ego)

'I' (first-person pronoun)

- egotism; egotistical;
- ALTER-EGO-ism, an altruistic feeling for only those who are in the same situation as oneself;
- EGO-mania, obsessive egotism or self-centredness;

 super-EGO, the part of a person's mind that acts as a self-critical conscience, reflecting social standards learned from parents and teachers

#### FACI-, (-FICI-) (facies)

'face', 'surface'

- BI-FACI-al, applies to leaves with distinct upper and lower surfaces;
- CORONO-FACI-al, relating to the crown of the head and the face;
- inter-FACE, a surface which forms the boundary between two faces or systems;
- super-FICIES, outer surface

#### FAV- (favus)

'honeycomb'

- FAV-ella, a conceptacle of certain red algae;
- FAV-eol-ate, honeycombed or alveolate:
- FAVUS, a distinctive type of tinea capitis characterized by the formation of honeycomb-like mats

#### FIBUL- (fibula)

'clasp', 'brooch' 'outer bone of the leg'

- FIBULA (pl. fibulae), the outer and usually smaller of the two bones between the knee and the ankle;
- in-FIBUL-ation, the controversial practice of excising the clitoris and labia of a girl or woman and stitching together the edges of the vulva to prevent sexual intercourse;
- para-FIBUL-ar, pertaining to an accessory element outside the fibula

#### FREN- (frenum)

'rein', 'bridle'

- FREN-ulum or FREN-um, (in anatomy) a small fold or ridge of tissue which supports or checks the motion of the part to which it is attached, in particular a fold of skin beneath the tongue, or between the lip and the gum; (in entomology, applying to some moths and butterflies) a bristle or row of bristles on the edge of the hindwing which keeps it in contact with the forewing;
- FREN-ate, having a frenulum

NOTE: 'frenzy', 'frenetic' are from Greek PHREN-, not this Latin root.

#### FRONT- (frons, frontis)

'forehead', 'front'

- FRONS (pl. frontes), the forehead or equivalent part of an animal, especially the middle part of an insect's face between the eyes and above the clypeus;
- FRONT-al, relating to the forehead or front part of the skull;
- FRONT-al BONE, the bone which forms the front part of the skull and the upper part of the eye sockets;
- FRONT-ad, toward the frontal aspect;
- FRONTO-NAS-al, pertaining to the frontal sinus and the nose

### **FRUCTIC-** (frutex, fruticis)

'shrub'

- FRUTEX, a shrub;
- FRUTIC-ose, (of a lichen) having upright or pendulous branches;
- FRUT-esc-ent, shrublike

NOTE: not to be confused with FRUG-/FRUCT-'fruit'

#### FRUG-, FRUCT- (frux, frugis; fructus)

'fruit'

- FRUCTI-FIC-at-ion, fruit formation;
- FRUCT-ose, fruit sugar;
- FRUCT-esc-ence, the period of maturing of fruits

# FURC- (furca)

'fork'

- FURC-ate;
- TRI-FURC-ate, to divide into three branches or forks; furca (pl. furcae, an ingrowth of the thorax of many insects;
- FURC-ula, the wishbone of a bird.

#### FUS- (fusus)

'spindle'

- FUSE-LAGE;
- FUS-illi, spindle-shaped pasta;
- FUS-arium, a mould of a large genus which includes a number that cause plant diseases, especially wilting;
- FUS-ee, a conical pulley or wheel, especially in a watch or clock

NOTE: Not to be confused with the other Latin root, FUND-, FUS- (pour, melt), as in 'fusion', 'fuse'.

#### **FUSC-** (fuscus)

'dark', 'brown', 'tawny'

- ob-FUSC-ate, make obscure, unclear, or unintelligible;
- FUSC-ous, dark and sombre in colour;
- FUSC-in, a brown pigment in the retinal epithelium

#### **GEMIN-** (**GEMELL-**) (*geminus*)

'twin', 'paired'; the second root is the diminutive form (*gemellus*)

- GEMIN-ate, growing in pairs, paired;
- BI-GEMIN-ate, doubly paired, twinforked;
- BI-GEMIN-y, the condition of occurring in pairs, or in cardiology, a premature beat coupled with each normal heartbeat

#### GEMM- (gemma)

'bud'

- GEM:
- GEMMA, a small cellular body or bud that can separate to form a new organism;
- GEMM-ation, asexual reproduction by the production of gemmae; budding;
- GEMM-ule, a tough-coated dormant cluster of embryonic cells produced by a freshwater sponge for development in more favourable conditions

#### GEN-, GENIT- (gigno → genui, genitus)

'to produce', 'to beget'

- pro-GENIT-or; con-GENI-al;
- con-GEN-er, a person, animal, plant or thing allied by origin, nature or function to another;
- GENIT-al:

NOTE: not to be confused with the Greek root GEN-'be produced' of List 1 and GEN(U)- 'knee' below.

#### **GENER-** (genus, generis)

'race', 'kind'

- GENER-ic
- GENER-ation

# GEN(U)- (genu)

'knee'

- GENU-ine (with reference to the Roman custom of a father acknowledging paternity of a newborn child by placing it on his knee):
- GENU-FLECT;
- GENU, the knee; (in Anatomy and Biology) a part of certain structures resembling a knee, in particular a bend in the corpus callosum of mammals;
- GENI-cul-ate, bent at a sharp angle NOTE: see note on GEN- above.

#### GERM-, GERMIN- (germen, germinis)

'sprout', 'bud', 'germ'

- GERM; GERM-ane;
- GERMIN-ate;
- GERM-icide, an agent that kills germs;
- GERMI-DUCT, the obiduct of a trematode (a parasitic flatworm)

NOTE: this is not the root for the country Germany, which comes from the Latin *Germania*, which probably is borrowed from Celtic. It is not, funnily enough, a Germanic word.

# GINGIV- (gingiva)

'the gums'

- GINGIVA, the gums;
- LABIO-GINGIV-al, pertaining to the lips and gums
- GINGIV-itis

#### **INCUS-, INCUD-** (incus, incudis)

'anvil'

- INCUS, the middle arc of the chain of ossicles in the ear, so named from its resemblance to an anvil;
- INCUD-ectomy, surgical removal of the incus

### **INGUIN-** (inguen, inguinis)

'groin'

- INGUIN-al, of the groin;
- ex-INGUIN-al, occurring outside the groin;
- INGUINO-DYN-ia, pain in the groin

#### ILE- (ileum)

'ileum' (part of the small intestine)

- ILEUM, the third portion of the small intestine, between the jejunum and the caecum;
- ILE-ac, pertaining to the ileum;
- ILEO-COL-ic, pertaining to the ileum and the colon

NOTE: careful not to confuse this one with the suffixes -il and -ile.

#### ILI- (ilium)

'flank, hip'

- ILIO-CAUD-al, connecting the ilium and the tail (applies to the muscle);
- SACRO-ILI-ac, pertaining to the ilium and sacrum

#### LAN- (lana)

'wool'

- LAN-OL-in, a fatty substance found naturally on sheep's wool;
- LAN-UGO, fine, soft hair, especially that which covers the body and limbs of a human fetus:
- LAN-UG-inous, covered with down

#### LENS-, LENT- (lens, lentis)

'lentil', 'lens'

- Lens
- LENS-oid, having the shape of a lentil/lens
- LENT-ic-el, one of many raised pores in the stem of a woody plant that allows gas exchange between the atmosphere and the internal tissues; lenticular, shaped like a lentil, especially by being biconvex; relating to the lens of the eye;
- LENTI-GER-ous, furnished with a lens

#### LOB- (lobus)

'lobe'

- LOBO-tomy, a surgical operation involving incision into the prefrontal lobe of the brain, formerly used to treat mental illness:
- LOB-ule, a small lobe;
- LOB-ular, pertaining to a lobule

#### LUMB- (lumbus)

'loin'

- LUMB-ar, relating to the lower part of the back;
- LUMB-ago, pain in the muscles and joints of the lower back

#### LUTE- (luteus)

'yellow', 'corpus luteum'

- CORPUS LUTEUM, the yellow endocrine body formed in the ovary at the site of a ruptured Graafian follicle;
- LUTE-al, pertaining to the corpus luteum;
- LUTE-in, a yellow chemical isolated from egg yolk

#### MAL(E)- (malus)

#### 'bad'

- MALE-FACT-or; M
- ALE-VOL-ent;
- MAL-FEAS-ance;
- MALE-DICT-ion;
- MAL-IGN;
- MAL-IGN-ant;
- MAL-PRACT-ice:
- MAL-ING-er, to pretend to be ill in order to escape duty or work;
- MAL-OCCLUS-ion, imperfect positioning of the teeth when the jaws are closed

NOTE: not to be consumed with MALLE- 'hammer' below or MAL- 'cheek' of List 7.

#### MALLE- (malleus)

#### 'hammer'

- MALLEUS, one of the ossicles of the inner ear having the shape of a hammer;
- MALLE-at-ion, a spasmodic action of the hands, consisting of continuously striking any nearby object

NOTE: not to be consumed with MAL(E)- 'bad' or MAL- 'cheek' of List 7.

#### NAR- (naris)

#### 'nostril'

- NARES, the nostrils;
- NARI-CORN, the horny part of the nostrils in Turbinares;
- NARI-form, shaped like nostrils

#### NOD- (nodus)

#### 'knot'

 NODE, the knob or joint of a stem at which the leaves arise, or an aggregation of specialized cardiac cells, or any small rounded organ, knob or protuberance

#### NUD- (nudus)

#### 'naked'

- NUDI-BRANCHI-ate, having gills not covered by a protective shell or membrane;
- NUDI-CAUD-ate, having a tail not covered by hair or fur

#### OLE- (oleum)

'oil'

- OLE-in, a fat which is liquid at ordinary temperatures, found in animal and vegetable tissues;
- OLEI-FER-ous, producing oil

#### **ORB-, ORBIT-** (orbita)

'circle', 'cavity of the eye'

- ORB; ORB-it;
- ORB-icul-ate, nearly circular in outline (applies to leaves);
- ORBITO-MAL-ar, pertaining to orbit and malar bones

#### PALPEBR- (palpebra)

#### 'eyelid'

- PALPEBRA, either of the two movable folds that protect the eyeball;
- PALPEBR-ate, furnished with eyelids, or to wink

#### PAPILL- (papilla)

'nipple'

- PAPILLA, a small rounded protuberance on a part or organ of the body;
- PAPILL-oma (pl. papillomas or papillomata), a small wart-like growth on the skin or on a mucous membrane, derived from the epidermis and usually benign

# PAR- (par)

'equal'

- PAR-ity, the state or condition of being equal;
- PARI-VINC-ular, applies to the bivalve hinge ligament attached to nymphae;
- PARI-PINN-ate, pinnate without a terminal leaflet;
- dis-PAR-ate, not situated alike

#### **PECTIN-** (pecto → pectitus; pecten)

'comb'

- PECTEN (pl. pectens or pectines), any of a number of comb-like structures occurring in animal bodies;
- PECTIN-ella, a comb-like membranella of some infusoria

# PEL(L)-, PULS- (pello $\rightarrow$ pulsus)

'to push', 'to drive', 'to beat'

- re-PEL;
- ex-PULS-ion:
- PULS-at-ile, pulsating, throbbing;
- PULS-ellum, a flagellum situated at the posterior end of the protozoan body

NOTE: don't confuse with PELL- 'skin' of List 8.

#### PILE- (pileus)

'felt cap'

- PILEUS, (in botany) the cap of a mushroom or toadstool; (in anatomy) one of the cerebellar hemispheres; the membrane which sometimes covers a child's head at birth;
- PILE-ated, crested (e.g. pileated woodpecker)

#### PINN-, PENN- (pinna; penna)

'feather', 'wing', 'fin'

- pen;
- pinnacle;
- PINNA (in anatomy and zoology) the external part of the ear in humans and other mammals; the auricle; (in botany) a primary division of a pinnate leaf, especially of a fern; (in zoology) any of a number of animal structures resembling fins or wings;
- BI-PENN-iform, feather-shaped, with sides of a vein of equal size;
- PINN-ule, a secondary division of a pinnate leaf, especially of a fern; (in zoology) a part or organ like a small wing or fin, especially a side branch on the arm of a crinoid

#### PLUR- (plus, plures)

'more', 'many'

- PLUR-al-ity;
- PLURI-VOR-ous, living upon several hosts, as fungus;
- PLURI-LOC-ul-ar, having more than one compartment or loculus

#### PULMO(N)- (pulmo, pulmonis)

'lung'

- PULMON-ary or PULMON-ic, relating to the lungs;
- GASTO-PULMON-ary, pertaining to the stomach and the lungs

# RAD-, RAS-, RAZ- (rado → rasus)

'to scrape'

- RAZE;
- RAZ-or;
- e-RAS-er;
- RAD-ula, (in a mollusc) a rasp-like structure of tiny teeth used for scraping food particles off a surface and drawing them into the mouth;
- RAST-er, a rectangular pattern of parallel scanning lines followed by the electron beam on a television screen or computer monitor

# SCAND- (-SCEND-), SCANS- (scando → scansus)

'to climb'

- a-SCEND;
- de-SCEND;
- SCANS-or-ius, the small, anterior gluteal muscle;
- SCANS-ores an order of birds having two toes before and two behind, such as parrots

#### SCOP- (scopa)

'broom', 'brush'

- SCOP-ate, having a tuft of hair like a brush:
- SCOP-arius, a species of shrub commonly called broom-tops

NOTE: don't confuse with Greek root SCOP- 'view' of List 2

#### SOLV-, SOLUT- (solvo → solutus)

'to loosen', 'to dissolve'

- SOLUTE, the dissolved substance in a SOLUT-ion:
- ab-SOL-ute, free from admixture

#### SPIC- (spica)

'point', 'spike'

- SPIC-ule or SPIC-ula, a small, spike-shaped bone; a needle-like body;
- SPIC-ate, spiked;
- SPIC-ulum, the dart of a snail

#### STRI- (stria)

'furrow', 'groove'

- STRIA, a streak or a line, a narrow, band-like structure;
- STRI-at-ure, striation, state of being striated, or the arrangement of striae

# TEMPOR- (tempus, tempora pl.)

'the temples'

- TEMPOR-al, (in anatomy) of or situated in the temples of the head;
- infra-TEMPOR-al, below the temporal fossa;
- PARIETO-TEMPOR-al, pertaining to the parietal and temporal bones or lobes;
- TEMPOR-al BONE, either of a pair of bones which form part of the side of the skull on each side and enclose the middle and inner ear;
- TEMPOR-al-is, a fan-shaped muscle running from the side of the skull to the back of the lower jaw involved in closing the mouth and chewing

NOTE: this is not to be confused with the common Latin Root TEMPOR- meaning time. They are homonyms in Latin, but mean different things.

# TEND-, TENS-, TENT- (tendo → tentum/tensum)

'to stretch'

- TENS-ion, the act of the stretching, the state of being stretched or strained:
- dis-TENS-ion, a state of dilation;
- TENS-or, a muscle that serves to make a part tense

NOTE: this one can look like some of the forms of TEN- 'hold' of List 8

#### **TENDIN-** (tendo, tendonis)

'tendon'

• TENDIN-it is

NOTE: the root is based on the medieval Latin word above, taken from the Greek τένων.

#### UNC-, UNCIN- (uncus; uncinus)

'hook'

- ad-UNC-ate, crooked; bent in the form of a hook;
- UNCI-form, shaped like a hook or barb;
- UNCI-FER-ous, bearing hooks or hook-like processes;
- UNCIN-ula, a genus of mildew with hooked appendages

# VAGIN- (vagina)

'sheath'

- VAGINA, any sheath-like structure, especially a sheath formed round a stem by the base of a leaf;
- Vagina, specifically the female reproductive tract which leads from the vulva to the uterus

NOTE: the modern use of vagina for the external female reproductive organs is taken directly from Latin. Originally, it was a metaphoric euphemism, equating the female reproductive organs to a sheath for a male penis, or "sword."

 e-VAGIN-ate, (with reference to a tubular or pouch-shaped organ or structure) to turn or be turned inside out

#### VELL-, VULS- (vello, vulsus)

'to tear'

- a-VULS-ion, the forcible tearing or wrenching away of a part, as a polyp or a limb; r
- e-VULS-ion, the drawing, by irritation, of blood from a distant part of the body

NOTE: not to be confused with VEL- 'veil' of List 9.

#### **VITELL-** (vitellus)

'yolk of an egg'

- VITELLUS, the yolk of an egg or ovum;
- VITELL-in, the chief protein constituent of egg yolk;
- VITELL-ine, relating to the yolk (or yolk sac) of an egg or embryo, or to yolk-producing organs;
- VITELL-ine MEMBRANE, a transparent membrane surrounding and secreted by the fertilized ovum, preventing the entry of further spermatozoa;
- VITELLO-GEN-in, a protein present in the blood, from which the substance of egg yolk is derived