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## The Cambridge Dictionary of Human Biology and Evolution

The *Cambridge Dictionary of Human Biology and Evolution* (CDHBE) is an invaluable research and study tool for both professionals and students covering a broad range of subjects within human biology, physical anthropology, anatomy, auxology, primatology, physiology, genetics, paleontology, and zoology. Packed with 13,000 descriptions of terms, specimens, sites and names, CDHBE also includes information on over 1000 word roots, taxonomies and reference tables for extinct, recent and extant primates, geological and oxygen isotope chronologies, illustrations of anatomical landmarks, bones and muscles, and an illustration of current hominid phylogeny, making this a must-have volume for anyone with an interest in human biology or evolution. CDHBE is especially complete in its inventory of archaeological sites and the best-known hominid specimens excavated from them, but also includes up-to-date information on terms such as *in silico*, and those relating to the rapidly developing field of human genomics.

LARRY L. MAI is Associate Professor in the Departments of Anthropology and Biological Sciences at California State University, Long Beach.

MARCUS YOUNG OWL is Professor in the Departments of Anthropology and Biological Sciences, also at California State University, Long Beach.

M. PATRICIA KERSTING is an editor at the Audio-Digest Foundation in Glendale, California.

# **The Cambridge Dictionary** of Human Biology and Evolution

LARRY L. MAI

*California State University, Long Beach*

MARCUS YOUNG OWL

*California State University, Long Beach*

M. PATRICIA KERSTING

*Audio-Digest Foundation, Glendale, California*



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## Preface

Human biology is a diverse and multidisciplinary field that includes or borrows from anthropology, anatomy, auxology, evolutionary biology, genetics, geology, physiology, and zoology. In our studies of human biology we found that medical or general biology dictionaries often did not define many terms used in non-clinical human biology. This was especially true of the core terms used in physical anthropology and primatology. We have attempted to bridge that gap with this work.

This compilation is intended to define and elaborate on the more important terms used in human biology and evolution. For readers with little background in these subjects, it identifies and provides definitions of core terms most frequently used in these areas. In addition, we have attempted to define, and occasionally annotate or expand on, subjects of interest to advanced students and professionals, such as fossil specimens, paleontological sites, and primate genera.

### **Rationalization of entries**

**Terms:** individual entries were selected by compiling lists of terms from glossaries and indices found in major textbooks and best-selling or classic works on relevant subjects. Approximately 30 000 terms were ranked with respect to ubiquity; the least frequent terms were then culled to leave a manageable body of about 13 000 terms. Occasionally, a neologism (e.g. genomics) was included when it was deemed that such terms would be useful in the future.

The 1000 most common terms are preceded in this dictionary by the symbol †. We hope that students will find these pointers useful.

Similarly, short biographies were included for individuals that have been most frequently mentioned in introductory textbooks. The editors apologize for any inadvertent omissions, and would appreciate suggestions in this area.

Please send comments, corrections and/or additions to [lmair@csulb.edu](mailto:lmair@csulb.edu) or [youngowl@csulb.edu](mailto:youngowl@csulb.edu).

Note that all terms apply to the human species by default, unless a primate is specifically mentioned.

## Preface

### Cross-referencing

Bold terms in the body of a definition refer to an entry elsewhere in the dictionary. In the following entry, for example,

‡ **matriline**: pertaining to the lineal descent of anything passed from a mother to her offspring, such as access to territory or other resource, social status within a dominance system, or specific genes that display a pattern of **maternal inheritance** such as those contained in **mitochondrial DNA**; matrilineal. Aka uterine descent, matrilinear inheritance. See **hologyny**. Cf. **patriline** and **holandry**.

the reader is referred to the entries *maternal inheritance*, *mitochondrial DNA* and *hologyny* for related or supplementary material, and to the terms *patriline* and *holandry* for contrasting material.

### A note on taxonomy

The fundamental unit of taxonomy is the species. The species name is always accompanied by its genus (although the genus may be abbreviated). These two terms form a binomen. The binomen is often followed by the authority when first presented in a publication. The authority is the name(s) of the author(s) who first described the species. That authority will forever follow the species name, even though the genus may change. For example, the original common description of the chimpanzee was by J. F. Blumenbach:

*Simia troglodytes* Blumenbach, 1775

Later a new genus name was accepted and a new authority for the genus was established, *Pan* Oken, 1816. However, the species name for the common chimpanzee remained the same. The original authority is retained, but is now enclosed by parentheses, thereby noting that there has been a change in the genus name. Thus,

*Pan troglodytes* (Blumenbach, 1775)

To be valid, a proposed taxonomic name for a living species must be examined and approved by a board of the International Commission on Zoological Nomenclature (ICZN). In the case of fossil species, the use of the species name in a subsequent publication by another author(s) validates a new species' name.

Appendixes 1 and 2 provide taxonomies of living and extinct primates. These are not formal taxonomies, but are intended to provide the reader with lists of species' names that have been used consistently in the literature, although not all are universally accepted.

# Acknowledgements

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Finally, we acknowledge and deeply appreciate the patience and forbearance of our colleagues, families and friends, especially Janine Bernor Mai and Rolaine Young Owl.

## Word roots

a-: not, without, negating	aqua-: water	bucc-: cheek
ab-: away from	arachn-: spider	cac-: bad, ill
abdom(in)-: abdomen, belly	arch-: first; origin; ancient	calcan(e)-: heel
-able: capable (of)	-aris: pertaining to	calc(i)-: heel; limestone; lime
ac-: to, toward	arteri(o)-: artery; wind pipe	calor(i)-: heat
acet(o)-: vinegar	arthr(o)-: joint	canc-: crab; ulcer; cancer
acid-: sour, bitter, sharp	arti-, art-: art	capit-: head
acous-: hearing	artic(ul)(o)-: joint	caps-: container, box
acro-: tip; top; height	as-: to, toward	carb-: coal, charcoal
act-: do, drive, act	-asia: pathological state	carcin-: crab; ulcer; cancer
acti(no)-: radius	-asis: condition, state (of)	card-: heart
acu-: needle; sharp	at-: to, toward	cary(o)-: nut; kernel; nucleus
ad-: to, towards	-atus: provided with	cat-: down, lower; against
aden(o)-: gland	audi-: hearing	caud-: tail
adip(o)-: fat	aur-: ear; gold	cav-: hollow
aer-: air, atmosphere; gas	austr-: south, southern	cec-: blind
aesthe-: perceive, feel	aut(o)-: self	celo-, -cele: tumor; cavity
af-: to, toward	aux-: grow, enlarge	cell-: small room; granary
-agogue: away, leading	axo-: axis; axle	cen(o)-: common; empty; new
agglutin: glue together	axill-: armpit	(-)cent(e)(-): puncture, prick
-agra: acute pain	ba-: walk, stand	centi-: hundred; hundredth
alb-: pale, white	bacill-: rod, little stick, wand	centr-: point, center
alg-: pain	bacteri(o)-: staff, cane	(-)cephal(-): head
-alis: of, belonging to	ball(o)-: throw	cept-: take, receive
all(o)-: other, different	bar-: heavy; pressure	cer-: wax
alve(ol)-: socket, channel	bas-: base, foundation	cera-: horn
ambi-: both; surround	bi-: two, twice; between	cereb-: brain
amph-: both, two	bili-: bile; anger	cervi-: neck
amyl(o)-: starch	(-)bio(-): life, living	chamae-: dwarflike; low
an-: up; back; not	biocenos-: compound prefix refer-	chancr-: crab; cancer
ancyl(o)-: crooked, bent	ring to living organisms in a	cheil(o)-: lip; edge; claw
andr(o)-: man, male	shared environment (is com-	cheir(o)-, chir(o)-: hand
ang-: vessel	posed of two stems)	chiasm-: cross-shaped
ankyl(o)-: bent; fusion	(-)blast(o)(-): bud, embryo	chlor(o)-: green
ante-: before	blep(o)-: looking, seeing	chol-: bile; anger
anthrop(o)-: human, Man	blephar-: eyelash	chondr(o)-: cartilage; grain
anti-: against, opposite	bol(o)-: throw	chord-: string, cord, gut
antr(o)-: cavern	brachi(o)-: arm	chori-: membrane; skin
-anus: belonging to	brachy-: short	chrom-, chromat(o)-: color
ap(ic)-: toward; tip	brad-: slow	chron-: time
-aph(e)-: touch	brom(o)-: stench; oats; food	chy-: pour; juice
apo-: derived from	bronch-: windpipe	-cid(e), -cidal: cut, kill
append(ic)-: attach	bryo-: be full of life; moss	cili(o)-: eyelid; eyelash; hairlike



### Word roots

cine-: movement  
 cingul-: girdle; belt  
 -cipient: receive, receptor  
 circum-: about, around  
 (-)cis(-): near side of  
 clad-: branch, offshoot  
 (-)clas(-): break, fragmented  
 cleav-: divide  
 clin(o)-: bend, incline, slope  
 clu-: shut, close  
 co-: with, together  
 cocc-: berry, grainlike  
 (-)coel(-): swelling, cavity  
 -coid: like  
 col-: with, together  
 colo(n): colon, limb  
 colp(o)-: hollow; womb  
 com-, con-: with, together  
 contra-: against, opposite  
 copr(o)-: feces, dung  
 cor-: with, together  
 corn-: animal horn; hard  
 coron-: crown; crow  
 corp-: body  
 cort-: bark, rind  
 cost(a)-: rib  
 crani-, -cranic: skull; helmet  
 cre-: meat, flesh  
 -cresc: growth, increase  
 cret-: chalk; separate; grow  
 crin(o)-: separate off; secrete  
 cross(o)-: at right angles  
 crur(a)-: shin, leg  
 crux-: at right angles; cross  
 cry(o)-, crym(o)-: cold, frost  
 crypt(o)-: hidden, concealed  
 cult-: tend, plow; worship  
 cune(i)-: wedge  
 cusp-: point, apex  
 cut-: skin, surface  
 cyan-: blue  
 cycl(o)-: circle, cycle  
 cyst(o)-: sac, bladder,  
 cyt(o)-, -cyte: cell  
 dacryl-: tear  
 dactyl(o)-: finger, toe  
 de-: down, lack of, from, out  
 dec(a)-: ten  
 demi-: half or lesser  
 dendr(o)-: tree, treelike  
 dent-: tooth  
 derm-: skin  
 desm-: band, ligament  
 dext-: to the right  
 di-: twice, two, double

di(a)-: through, completely  
 didym(a)-: twin; double; testis  
 digit-: finger, toe  
 dipl-: double, twice, twin  
 dis-: reversal; separation  
 disc-: plate, disk  
 dist-: distant  
 dolicho-: long  
 -donto-: tooth  
 dors(o)-: back  
 drom-: running; race course  
 -ducent: lead, conduct  
 duc(t)-: lead, conduct; carry  
 dur-: hard  
 dyn-: power  
 dys-: bad; ill; difficult; enter  
 e-: from, without, other than  
 ec-: out, outside  
 (-)ech(-): have, hold, be  
 eco-: house, dwelling  
 ecto-: out, outside, external  
 -ectomy: surgical removal  
 ede-: swelling; genitals  
 electr-: amber; electricity  
 -ellus: diminutive; small  
 (-)em(-): in; within; blood  
 -emia: state of the blood  
 en-: in, within  
 encephal(o)-: brain  
 end(o)-: inside, within  
 -ens: belonging to (a locality)  
 enter(o)-: intestine  
 ep(i)-: upon, beside, above  
 equi-: equal to; horse  
 erg(o)-: work, deed  
 erythr(o)-: red  
 eso-: inside, within, inward,  
 esth-: perceive; clothe; eat  
 ethm-: sieve  
 eu-: well, good, normal, easily  
 ex(o)-: outside, outward  
 extra-: outside of, beyond  
 faci-: face  
 -facient: making, causing  
 -fact-: make  
 fasci-: band; bundle  
 febr(i)-: fever; boil  
 -fect-: make  
 -ferent: bear, carry  
 ferr(o)-: iron  
 fibr-: fiber  
 fil-: thread  
 fili-: son, daughter  
 fiss-: split, cleft  
 flagell-: whip

flav-: yellow  
 -flect-, (-)flex-: bend, divert  
 flu-: flow  
 for-: door, opening  
 fore-: before  
 -form: shape, resembling  
 fract-: break  
 front(o)-: forehead, front  
 -fug: flee, avoid; banish  
 funct-: perform, serve  
 fund-: pour; alkaline  
 furc-: fork  
 fus-: pour; spindle  
 gala-: milk  
 gam-: marriage  
 gangli-: swelling, knot  
 gast-: stomach  
 gelat-: freeze, congeal  
 gemin-: twin, double; coupled  
 gen(o)-, -gen: originate; race  
 -gene, -genic, -geny: origin  
 geo-: earth  
 germ-: bud; seed  
 gera-: old age  
 gest-: bear, carry  
 giga-: giant  
 gland-: acorn  
 glen(o)-: pit, socket  
 -gli: glue  
 gloss-: tongue  
 glott-: tongue; language  
 gluc-: sweetness  
 glutin-: glue  
 glyc-: sweet  
 (-)gnath(-): jaw  
 gnos-: know; knowledge  
 gon-: produce; seed; angle  
 -gony: seed; offspring  
 grad-: walk; slope  
 gram-: grass  
 -gramm: scratch, write  
 gran-: grain, seed  
 (-)graph-: write, record  
 grav-: heavy; pregnancy  
 gymn-: naked, exposed  
 gyn-: woman, female  
 gyr-: ring, circle  
 haem-: blood  
 halo-: salt; breathe  
 hapl(o)-: simple, single  
 hapt(o)-: touch; fasten  
 hect(o)-: hundred  
 helco-: sore, ulcer; suck  
 helic(o)-: spiral  
 helio-: sun

## Word roots

hem-: blood	labi-: lip	mu-: change
hemi-: half	lacr-: tears	multi-: many, much, several
hen(o)-: one; year	lact-: milk	my(o)-: muscle; mouse
hepa-: liver	lal-: speech	myc-: fungus, fungal
hept(a)-: seven	lapar(o)-: loin, flank; abdomen	myel-: marrow; spinal cord
hered-: heir; inherit	laryng-: windpipe; gullet	myx-: mucus, slime
heter(o)-: other, different	lat(i)-: wide	narc-: numbness, stupor
hex(a)-: six	later-: to the side	nas-: nose
hidro-: sweat	lent-: thick, slow	ne(o)-: new, recent, immature
hist(o)-: tissue, web	lepi-: scale, flake	necr(o)-: death; dead
hod(o)-: road, path	leps-: take, seize	nephr-: kidney
hol(o)-: whole, entire	lept-: slender	neur-: nerve; cord
homeo-: same; constant	leuc(o)-, leuk(o): white	nod-: knot
horm-: impetus, impulse	lien-: spleen	non-: not; nine
hyal(o)-: glasslike	liga-: tie, bind	nos(o)-: disease
hydat-, hydr-: water	limn-: swamp, marsh; lake	noth(o)-: spurious; a mongrel
hygr(o)-: wet; moist	lingu(a)-: tongue	noto-: back
hyl-: wood; matter	lip(o)-: fat; leave; lack	nuc(le)-: nut, kernel; nucleus
hyper-: above, beyond	lith-: stone, calculus	nutri-: nourish, nourishing
hyp(o)-: under, below	loc-: place	nyc-: night
hypn(o)-: sleep; hypnosis	log(o)-: discourse, words	ob-, oc-: inversely, against
hyps-: high	-logy: study of	ocul-: eye
hyster(o)-: uterus; lower; latter	lumb-: loin; lower back	-od-, -ode: road, pathway
-ia: state, condition	lut-: yellow; mud	odont(o)-: tooth, toothlike
iatr-: physician; medicine	ly(o)-: dissolved; loose	-odyn: pain, distress
-id: form, shape; condition	lymph-: water; nymph	-oid: form; resembling
idi-: small; peculiar to	-lys: dissolve; loose; solution	-ol: oil; alcohol
il-: not; without; in	macr(o)-: long; large	ole-: oil; olive
ile(o)-: intestine; twist; roll	mal-: bad, abnormal; ill	olecran(o)-: elbow
ilia-: flank, loin	malac-: soft	olig(o)-: few, small, deficient
im-: in, within; not	mamm-: teat; breast	-(o)logy: discourse or study
immun-: safe, free, exempt	man(u)-: hand	-oma: tumor
in-: in, within; not	mani-: mental aberration	omni-: all, everywhere
infra-: beneath, below	mast(o)-: breast; nipple	omphal-: umbilicus, navel
insul(a)-: island	medi-: middle	onc(o)-: mass, tumor, swelling
inter-: between	mega-: great, large	onych(o)-: claw, nail
intr(a)-: inside, within, during	mel(o)-: limb, member; cheeks	oo-: egg, ovum
-inus: like	melan(o)-: black; dark	ophthalm(o)-: eye
-ion: go, enter; small	men(o)-: month	opt-: see, vision, sight
ir-: in, within; not	menin-: membrane	or-: mouth
iri-: rainbow; iris (of the eye)	ment-: mind, chin	orbi-: circle
isch(o)-: suppress	mer-: part	orchi-: testis, testicle
ischi-: hip	mes(o)-: middle, intermediate	organ(o)-: instrument; organ
-iscus: less than or smaller	met-: after; beyond; change	orth-: straight, normal, exact
-ism: belief; process; state of	(-)metr-: measure; uterus	-ory: pertaining to; effect of
iso-: equal, same, uniform	micr(o)-: small	-os, -osus: full of; prone to
-itis: inflammation	mid-: middle	oss-, ost-: bone
jact-; ject-: throw	mill-: one thousand	ot-: ear
jejun(o)-: empty; hungry; dry	miss(i)-: send	ov-: egg
jug(o)-, junct-: yoke; join	mito-: thread	oxy-: sharp, quick, sour; acid
juxta-: near, beside	-mittent: sending	pach(y)-: thick
kary(o)-: nucleus, nut, kernel	mnem-: remember	pagi(o)-: fix, make fast
kerat(o)-: horn	mon-: one, single	pale(o)-: old, ancient
kilo-: thousand	(-)morph(-): form, shape	pan-: all; general, global
kine-: movement; moveable	mot-: move	par(a)-: beside, parallel

### Word roots

-parous: producing; birthing  
 partum-: bear, give birth to  
 path(o)-, -pathy: disease  
 pec-: fix, make fast; comb  
 ped(o)-, pedi-: child; foot; soil  
 pell-: skin  
 -pellent: drive  
 pelv-: basin, bowel  
 pen(e)-: need, lack; almost  
 pend-: hang down  
 -penia: deficiency  
 pent(a)-: five  
 pep-: digest; cook  
 per-: through, completely  
 peri-: around, surrounding  
 pet-: seek, tend toward  
 petr-: rock, stone  
 pex-, -pexy: fix, make fast  
 pha-: say, speak  
 phac-, phak-: lentil; lens  
 phag-: eat, swallow  
 -phagous: eating, feeding on  
 phan-: show; appear  
 pharm(ac)-: drug; toxin  
 pharyn-: throat, pharynx  
 phen-: show, be seen  
 pher-, phor-: bear, carry  
 (-)phil(-): like, love, affinity for  
 phleb(o)-: vein, blood vessel  
 phleg-, phlog-: burn, inflame  
 (-)phob(-): fear, dread  
 phon-: sound  
 phor-: show; carry, move  
 phot(o)-, phos-: light  
 phragm, phrax-: fence, wall  
 phren-: mind; heart  
 phthi-: decay, waste away  
 phy-: beget, bring forth  
 phyc-: seaweed  
 phyl-: race, tribe, kind  
 phyla-: guard  
 phyll(o)-, -phyll: leaf  
 phys-: blow, inflate; nature  
 pico-: one trillionth  
 pil(i)-: hair  
 -pithecus: simian; ape  
 pituit-: phlegm  
 placent-: flat cake; placenta  
 plas-: form; mold; shape  
 plasm-, -plast: mold, form  
 plat-: broad, flat  
 (-)pleg(-): blow, stroke  
 pleo-: more  
 plesi(o)-: near  
 pletho-: fill

pleur-: rib, side  
 plex-: strike; network; plait  
 plic(o)-: fold  
 plio-: more  
 (-)pne(-): breathe; lungs; air  
 pod(o)-: foot  
 (-)poie(-): make, produce  
 poikilo-: variable, various  
 pol(i)-: axis of a sphere  
 poly-: many, much  
 pont(i)-: bridge  
 por-: passage; stone; pore  
 posit-: put, place  
 post-: behind in time or place  
 pre-: before in time or place  
 press-: stress, strain  
 prim-: first  
 pro(s)-: before in time or place  
 proct(o)-: anal or rectal region  
 prosop(o)-: face  
 proto-: first, earliest form of  
 pseud(o)-: false  
 psych-: soul, mind; thought  
 psychr(o)-: cold  
 pto-: fall  
 pub(er)-: adult  
 pulmo(no)-: lung  
 puls-: drive; stroke; beat  
 punct(i)-: prick, pierce  
 pur(i)-: pus  
 py-: pus  
 pyel(o)-: trough; basin  
 pyl(o)-: door, orifice  
 pyr(i)-: fire, heat, fever  
 quadr-: four, fourth, fourfold  
 quasi-: almost; nearly; like  
 quin-, quinque-: five, fifth  
 rachi-: spine  
 radi-: rays; radius; spoke  
 re-: back; again  
 rect-: straight  
 ren-: kidney  
 retr-: net  
 retr(o)-: backwards, behind  
 rhag-: break, burst, cracked  
 (-)rhaph(-): suture, seam  
 rhe(o)-: flowing, current  
 rhexi-: break, burst, rupture  
 (-)rhin(o)-: nose  
 rhiz(o)-: root  
 rota-: wheel  
 -rrhage, -rrhea: flow  
 rube-, rubi-, rubr-: red  
 saggit-: arrow  
 salpin-: trumpet; tube

sangui-: blood  
 sarc-: flesh  
 schist(o)-: split, cleft  
 schiz(o)-: split, cleft, divide  
 scler(o)-: hard  
 scop-, -scope, -scopy: look at  
 (-)sect(-): cut, cutting  
 semi-: half, partly  
 sens(i)-: perceive, feel  
 sep-: rot, decay; infect  
 sept-: seven; fence  
 ser-: whey, watery substance  
 serrate-: saw-edged  
 sex(a)-: six  
 sial-: saliva  
 simi-: ape  
 sinu-: hollow, fold  
 -sis: process, action  
 sit-: food; place, location  
 solut-, -solv-: loose, dissolve  
 soma-, -some: body  
 spas-: draw, pull  
 spectr-: presence; apparition  
 sperg-: scatter  
 sperm-: seed  
 sphen-: wedge  
 spher-: ball, globe, round  
 sphin-: draw tight, constrict  
 sphygm(o)-: pulse  
 spin(i)-: thorn  
 spir(o)-: breathe; coil  
 splanchn-: viscera  
 splen-: patch  
 spor-: seed, spore  
 squam-: scale  
 sta-: make stand, stop  
 stal-: send  
 staphyl(o)-: cluster of grapes  
 stea-: fat  
 sten(o)-: narrow, constricted  
 ster-: solid; three dimensional  
 sterc-: feces, dung  
 sthen-: strength  
 stol-: send  
 stomat-: mouth, orifice  
 -stomy: surgical opening  
 streph(o)-: twist  
 strict-: draw tight, compress  
 -stringent: draw tight  
 stroph-: twist; cord  
 struct-: pile up (against), build  
 sub-, suf-, sup-: under, below  
 super-, supra-: above, beyond  
 sutur-: sew; stitch; seam  
 sy(l)-, sym-, syn-: join, together

## Word roots

ta-: stretch, put under tension	thym(o)-: soul, emotions	typh(o)-: fog, stupor
tac-: order, arrange	thyr(eo)-: shield	typhl(o)-: blindness
tach-: swift, rapid, speed	tme-: cut	ultr-: beyond, excess
tact(i)-: touch	toc(o)-: childbirth	un-: not; one
tapein(o)-: flat; low	(-)tom(-): cut, slice; layer	ur(o)-, uron(o)-: urine; tail
taph-: grave, burial	ton(o)-: stretch; tone	-uria: diving bird; urine
tax-, -taxis: order, arrange	top(o)-: place, position	vacc(i)-: cow
tect-, teg-: cover, roof	tors-: twist	vagin(o)-: sheath
tele(o)-: at a distance; end	toxic-: poison	vas-: vessel, duct
tempor-: time, timely; temple	trache-: windpipe	verm(i)-: worm
ten-: hold; stretched	trachel(o)-: neck	vers, verti-: turn
ter-: thrice, three	tract-: draw, drag	vesic(o)-: bladder; blister
test-: shell; oyster	trans-: across, over	viscer-: organ
tetr-: four	trauma(to)-: wound	vit(al)-: life
thec-: repository, case, sheath	tri-: three, third	vor-, -vore: eating, feeding
thel(i)-: nipple	trich(o)-: hair	vuls-: pull, twitch
the(o)-: put, place; god	trips(i)-: rub	xanth(o)-: yellow, blond
therap-: treatment; serve	triplo-: three; triad	xen-, -xene: alien; strange
therm(o)-: heat; summer	(-)trop(-): turn, change, rotate	xer(o)-: dry
thero-: wild animal; wolf	(-)troph(-): food, nourishment	-yl-: matter, substance
thi-: sulphur	tuber(i)-: swelling, node	zo-, -zoic, -zoite: animal
thora(co)-: chest	tych-: chance	zyg(o)-: yoke, union
thromb(o)-: clot	typ-, -type: type; image	zym(o)-, -zyme: fermentation

# Abbreviations

1°, 2°, etc.	primary, secondary, etc.
3-D	three-dimensional
ACLU	American Civil Liberties Union
aka	also known as
AMH	anatomically modern human
Ar/Ar	argon–argon dating technique
BCE	Before Common Era
BP	(years) before present
bp	base pair(s)
by	billions of years
bya	billions of years ago
CDC	US Centers for Disease Control and Prevention
CE	Common Era
cf.	compare
DOE	US Department of Energy
esp.	especially
FBI	Federal Bureau of Investigation
IgM, etc.	immunoglobulin M, etc.
IQ	Intelligence Quotient
K/T	Cretaceous–Tertiary boundary
ky	thousands of years
kya	thousands of years ago
my	millions of years
mya	millions of years ago
SI	Système International d'Unités
TL	thermoluminescence dating technique
U/Th	uranium–thorium dating technique
U-series	uranium series dating technique

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