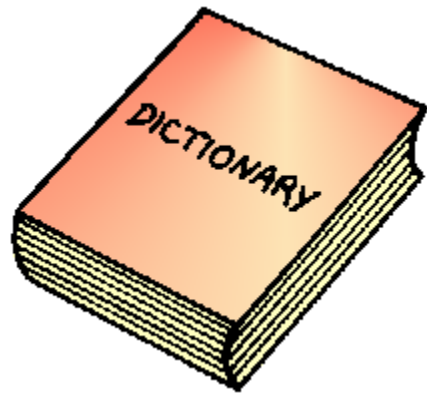


Science of Veterinary Medicine

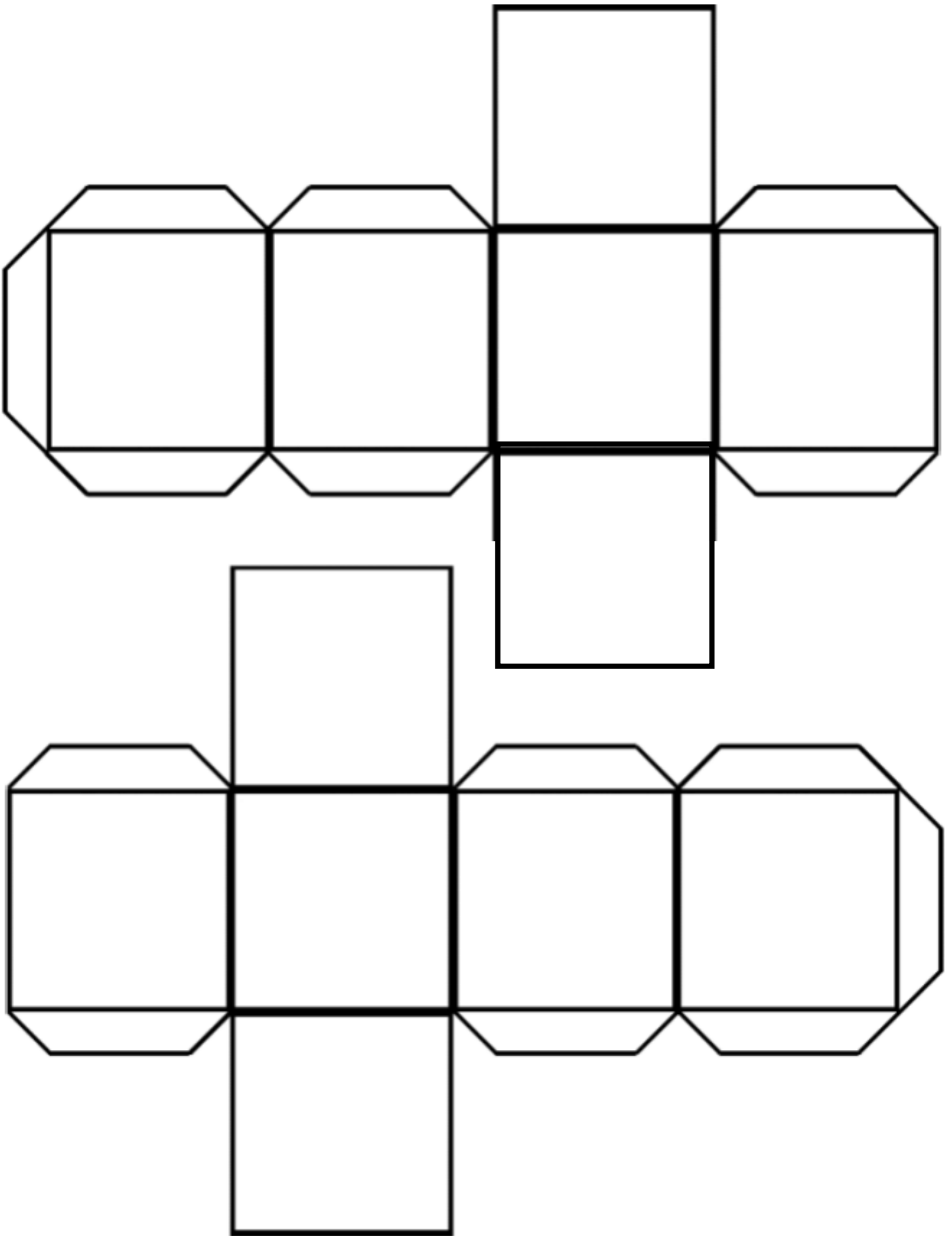


Veterinary Terminology Unit Handouts

Scientific Root Words, Prefixes, And Suffixes

a-, an-	not, without, lacking, deficient	centi-	hundredth	-escent	becoming
ab-	away from, out from	centr-	center	eso-	inward, within, inner
-able	capable of	cephal-	head	eu-	well, good, true, normal
ac-	to, toward	cerat-	horn	eury-	widen
-aceous	of or pertaining to	cerebr-	brain	ex-	out of, away from
acou-, acous-	hear	cervic-	neck	extra-	beyond, outside
ad-	to, toward	chel-	claw	-fer-	bear, carry, produce
aden-	gland	chem-	dealing with chemicals	ferro-	iron
adip-	fat	chir-	hand	fibr-	fiber, thread
aero-	air	chlor-	green	-fid, fiss-	split, divided into
agri-	field, soil	chondr-	cartilage	-flect, -flex	bend
-al	having the character of	chrom-, -chrome	color	flor-	flower
alb-	white	chron-	time	flu-, fluct-, flux	flow
alg-, -algia	pain	-chym-	juice	foli-	leaf
alto-	high	-cid-, -cis-	cut, kill, fall	fract-	break
ambi-	both	circa-, circum-	around, about	-gam-	marriage
ameb-	change, alternation	cirru-	hairlike curls	gastr-	stomach
amni-	fetal membrane	co-	with, together	geo-	land, earth
amphi-, ampho-	both	cocc-	seed, berry	-gen-, -gine	producer, former
amyl-	starch	coel-	hollow	-gene-	origin, birth
ana-	up, back, again	coll-	glue	-gest-	carry, produce, bear
andro-	man, masculine	coni-	cone	-glen-	eyeball
anemo-	wind	contra-	against	-glob-	ball, round
ang-	choke, feel pain	corp-	body	gloss-	tongue
angi-	blood, vessel, duct	cort-, cortic-	outer layer	gluc-, glyc-	sweet, sugar
ante-	before, ahead of time	cosmo-	world, order, form	glut-	buttock
anter-	front	cotyl-	cup	gnath-	jaw
antho-	flower	counter-	against	-gon	angle, corner
anti-	against, opposite	crani-	skull	-grad-	step
anthropo-	man, human	cresc-, cret-	begin to grow	-gram, graph	record, writing
-ap-, -aph-	touch	crypt-	hidden, covered	grav-	heavy
apo-, ap-	away from	-cul-, -cule	small, diminutive	-gross-	thick
aqu-	water	cumul-	heaped	gymno-	naked, bare
archaeo-	primitive, ancient	cuti-	skin	gyn-	female
-ary, -arium	denotes a place for something	cyan-	blue	gyr-	ring, circle, spiral
arteri-	artery	-cycle, cycl-	ring, circle	-hal-, -hale	breathe, breath
arthr-	joint, articulation	-cyst-	sac, pouch, bladder	halo-	salt
-ase	forms names of enzymes	cyt-, -cyte	cell, hollow container	hapl-	simple
aster-, astr-	star	dactyl-	finger	hector-	hundred
-ate	verb form – the act of	de-	away from, down	-helminth-	worm
anther-	fatty deposit	deca-	ten	hem-	blood
-ation	noun form – the act of	deci-	tenth	hemi-	half
atmo-	vapor	deliquesc-	become fluid	hepar-, hepat-	liver
audi-	hear	demi-	half	herb-	grass, plants
aur-	ear	dendr-	tree	hetero-	different, other
auto-	self	dent-	tooth	hex-	six
bacter-, bactr-	bacterium, stick, club	derm-	skin	hibern-	winter
barb-	beard	di-, dipl- (Latin)	two, double	hidr-	sweat
baro-	weight	di-, dia- (Greek)	through, across, apart	hipp-	horse
bath-	depth, height	dia- (Latin)	day	hist-	tissue
bene-	well, good	digit-	finger, toe	holo-	entire, whole
bi- (Latin)	two twice	din-	terrible	homo- (Latin)	man, human
bi-, bio- (Greek)	life, living	dis-	apart, out	homo- (Greek)	same, alike
-blast-	sprout, germ, bud	dorm-	sleep	hort-	garden
brachi-	arm	dors-	back	hydr-	water
brachy-	short	du-, duo-	two	hygr-	moist, wet
brady-	slow	-duct	lead	hyper-	above, beyond over
branchi-	fin	dynam-	power	hyph-	weaving, web
brev-	short	dys-	bad, abnormal, difficult	hyphno-	sleep
bronch-	windpipe	ec-	out of, away from	hypo-	below, under, less
cac-	bad	echin-	spiny, prickly	hyster-	womb, uterus
calor-	heat	eco-	house	-iae	person afflicted with disease
capill-	hair	ecto-	outside of	-iasis	disease, abnormal condition
capit-	head	-elle	small	-ic	(adjective former)
carcin-	cancer	-emia	blood	-chthy-	fish
cardi-	heart	en-, endo-, ent-	in, into, within	ign-	fire
cam-	meat, flesh	-en	made of	in-, il-, im-, ir-	not
carp-	fruit	encephal-	brain	in-, il-, im-, ir-	to, toward, into
carpal-	wrist	enter-	intestine, gut	in-	very, thoroughly
cata-	breakdown, downward	entom-	insects	-ine	of or pertaining to
caud-	tail	-eous	nature of, like	infra-	below, beneath
-cell-	chamber, small room	epi-	upon, above, over	inter-	within, inside
cen-, cene-	now, recent	-err-	wander, go astray	intra-	between
cente-	pierce	erythro-	red	-ism	a state or condition

iso-	equal, same	oo-	egg	saur-	lizard
-ist	person who deals with	ophthalm-	eye	schis-, schiz-	split, divide
-it is	inflammation, disease	opt-	eye	sci-	know
-ium	refers to a part of the body	orb-	circle, round, ring	scler-	hard
-kary-	cell nucleus	-orium, -ory	place for something	-scop-	look, device for seeing
kel-	tumor, swelling	ornith-	bird	-scribe, -script	write
kerat-	horn	orth-	straight, correct, right	semi-	half, partly
kilo-	thousand	oscu-	mouth	sept-	partition, seven
kine-	move	-osis	abnormal condition	-septic	infection, putrefaction
lachry-	tear	oste-	bone	sess-	sit
lact-	milk	oto-	ear	sex-	six
lat-	side	-ous	full of	-sis	condition, state
leio-	smooth	ov-	egg	sol-	sun
-less	without	oxy-	sharp, acid, oxygen	solv-	loosen, free
leuc-, leuk-	white, bright, light	pachy-	thick	som-, somat-, -some	body
lign-	wood	paleo-	old, ancient	somn-	sleep
lin-	line	palm-	broad, flat	son-	sound
lingu-	tongue	pan-	all	spec-, spic-	look at
lip-	fat	par-, para-	beside, near, equal	-sperm-	seed
lith-, -lite	stone, petrifying	path-, -pathy	disease, suffering	-spher-	ball, round
loc-	place	-ped-	foot	spir-, -spire	breathe
-log-	word, speech	-ped-	child	-spor-	seed
-logist	one who studies	pent-	five	stat-, -stasis	standing, placed, staying
-logy	study of	per-	through	stell-	stars
lumin-	light	peri-	around	sten-	narrow
-lys, -lyt, -lyst	decompose, split, dissolve	permea-	pas, go	stern-	chest, breast
macr-	large	phag-	eat	stom-, -stome	mouth
malac-	soft	pheno-	show	strat-	strat
malle-	hammer	-phil-	loving, fond of	stereo-	solid, 3-dimensional
mamm-	breast	phon-, -phone	sound	strict-	drawn tight
marg-	border, edge	-phore,, pher-	bear, carry	styl-	pillar
mast-	breast	photo-	light	sub-	under, below
med-	middle	phren-	mind, diaphragm	super-, sur-	over, above, on top
meg-	million, great	phyc-	seaweed, algae	sym-, syn-	together
mela-, melan-	black, dark	phyl-	related group	tachy-	quick, swift
-mer	part	-phyll	leaf	tarso-	ankle
mes-	middle, half, intermediate	physic-	nature, natural qualities	tax-	arrange, put in order
met-, meta-	between, along, after	phyt-, phyte	platin	tele-	far off, distant
-meter, -metry	measurement	pino-	drink	telo-	end
micro-	small, millionth	pinni-	feather	terr-	earth, land
milli-	thousandth	plan-	roaming, wandering	tetr-	four
mis-	wrong, incorrect	plasm-, -plast-	form, formed into	thall-	young shoot
mito-	thread	platy-	flat	-the-, -thes-	put
mole-	mass	pleur-	lung, rib, side	-thel-	cover a surface
mono-	one, single	pneumo-	lungs, air	therm-	heat
mort-	death	-pod	foot	-tom-	cut, slice
mot-	move	ply-	many, several	toxico-	poison
morph-	shape, form	por-	opening	top-	place
multi-	many	port-	carry	trache-	windpipe
mut-	change	post-	after, behind	trans-	across
my-	muscle	pom	fruit	tri-	three
myc-	fungus	pre-	before, ahead of time	trich-	hair
mycel-	threadlike	prim-	first	-trop-	turn, change
myriad-	many	pro-	forward, favoring, before	-troph-	nourishment, one who feels
moll-	soft	p[ro]to-	first, primary	turb-	whirl
nas-	nose	pseudo-	false, deceptive	-ul-, -ule	diminutive, small
necr-	corpse, dead	psych	mind	ultra-	beyond
nemat-	thread	pter-	having wings or fins	uni-	one
neo-	new, recent	pulmo-	lung	ur-	urine
neprho-	kidney	puls-	drive, push	-ura	tail
-ner-	moist, liquid	pyr-	heat, fire	vas-	vessel
neur-	nerve	quadr-	four	vect-	carry
noct-, nov-	night	quin-	five	ven-, vent-	come
-node	knot	radi-	ray	ventr-	belly, underside
-nom-, -nomy	ordered knowledge, law	re-	again, back	-verge	turn, slant
non-	not	rect-	right, correct	vig-	strong
not-	back	ren-	kidney	vit-, viv-	life
nuc-	center	ret-	net, made like a net	volv-	roll, wander
ob-	against	rhag-, -rrhage	burst forth	-vor-	devour, eat
ocul-	eye	rhe-, rhea	flow	xanth-	yellow
oct-	eight	rhin-	nose	xero-	dry
odont-	tooth	rhiz-	root	xyl-	wood
-ond	form, appearance	rhodo-	rose	zo-, -zoa	animal
olf-	smell	roto-	wheel	zyg-	joined together
oligo-	few, little	rubr-	red	zym-	yeast
-oma	abnormal condition, tumor	sacchar-	sugar		
omni-	all	sapr-	rotten		
onc-	mass, tumor	sarc-	flesh		



Veterinary Terminology

Directions: Match the prefix, suffix, or root on the left with the correct meaning on the right.

- | | | |
|-----------|-----------|-----------------------|
| 1. _____ | -natal | A. inflammation |
| 2. _____ | hepat/o- | B. around |
| 3. _____ | iso- | C. cell |
| 4. _____ | -itis | D. liver |
| 5. _____ | ur/o- | E. red |
| 6. _____ | eu- | F. birth |
| 7. _____ | -cyte | G. equal |
| 8. _____ | dys- | H. urine |
| 9. _____ | erythr/o | I. difficult |
| 10. _____ | peri- | J. normal |
| 11. _____ | cuti- | K. foot, child |
| 12. _____ | nas/o | L. head |
| 13. _____ | -blast- | M. after |
| 14. _____ | -ped- | N. eating, swallowing |
| 15. _____ | enter/o | O. skin |
| 16. _____ | post- | P. nose |
| 17. _____ | -phag | Q. against |
| 18. _____ | anti- | R. intestines |
| 19. _____ | -osis | S. sprout, germ, bud |
| 20. _____ | cephal/o- | T. abnormal condition |

Directions:

- Dissect the following words into their pieces by drawing a line between the prefix, root, combining form, and suffix.
- Define each piece.
- Write a definition for the whole word.

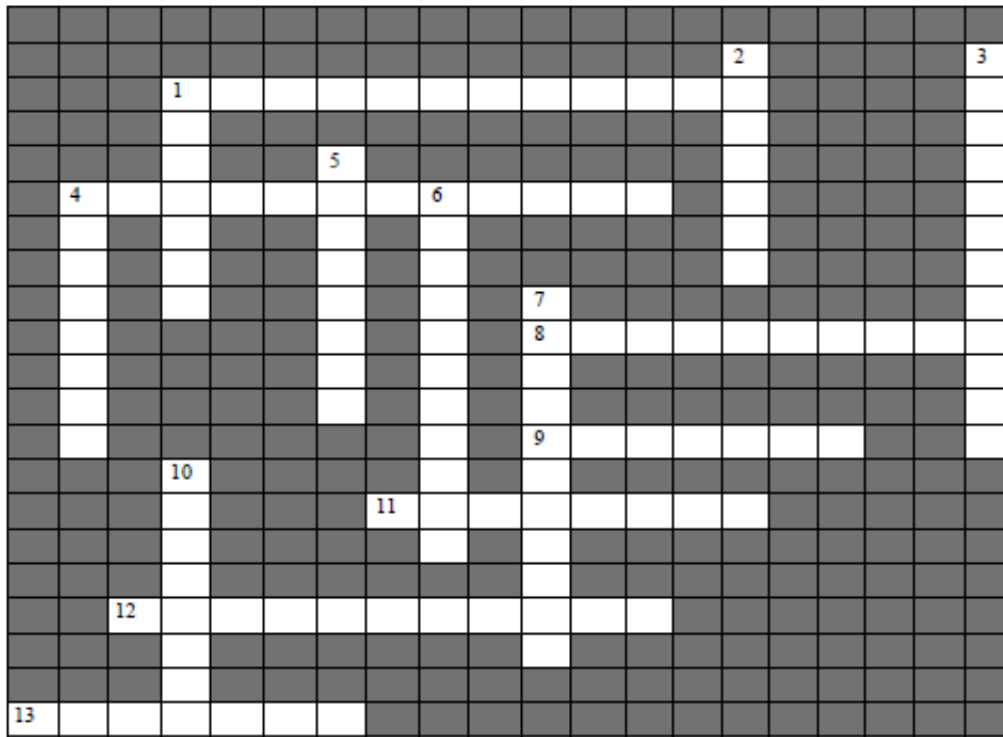
Example:

C a r d i o l o g y = c a r d i / o / l o g y		
Heart		study of
Cardiology = the study of the heart		

- | | |
|--------------------|------------------|
| 21. Anemia | 26. Mastitis |
| 22. Angiogram | 27. Millimeter |
| 23. Declaw | 28. Pericarditis |
| 24. Dysuria | 29. Subcutaneous |
| 25. Hydrocephalous | 30. Tetrapod |

Crossword

Directions: Read the clues below and fill in the boxes that correspond with the number of the clue.



Across:

1. Abnormally large liver
4. Abnormally large heart
8. An incision into the trachea blood cell
9. Insufficient oxygen
11. An instrument used to examine the ear
12. A recording of the mammary gland
13. The study of the urinary system

Down:

1. Pertaining to water
2. Difficulty breathing
3. Destruction of the red
4. Pertaining to the head
5. Producing a lot of urine
6. Red blood cell
7. Instrument used to listen to the chest
10. Newborn

Common Abbreviations

<u>Abbreviation</u>	<u>Meaning</u>
ad lib.	As much as desired
sid	One time daily
bid	Two times daily
tid	Three times daily
qid	Four times daily
qh	Every hour
qd	Every day
w/o	Without
stat	Immediately
n	Normal
DSH	Domestic short hair (cat)
DLH	Domestic long hair (cat)
Dx	Diagnosis
Hx	History
Rx	Prescription
Sx	Surgery
FeLV	Feline leukemia virus
FIA	Feline infectious anemia
FIP	Feline infectious peritonitis
ECG	Electrocardiogram
ICU	Intensive care unit
cc	Cubic centimeter, mL
mL	Milliliter, cc
wt	Weight
HR	Heart rate
PCV	Packed cell volume
sg	Specific gravity
TPR	Temperature, pulse, respiration
UA, U/A	Urinalysis
IM	Intramuscular
IP	Intraperitoneal
IV	Intravenous
Sub-Q	Subcutaneous
rbc	Red blood cell
wbc	White blood cell
DVM	Doctor of Veterinary Medicine
CNS	Central nervous system
GI	Gastrointestinal
DOA	Dead on arrival
DOB	Date of birth
♀	Female
♂	Male

Name: _____ Date: _____ Period: _____

Common Abbreviations

Purpose: Veterinarians and their staff use dozens of abbreviations that they use. It is important to know the correct meaning for each abbreviation, otherwise serious mistakes could be made and animals could die.

Directions: Read each sentence and write the correct abbreviation above the underlined words.

1. Doctor Center is needed in the intensive care unit immediately. His patient just came out of surgery and needs an electrocardiogram.
2. Snowball is a female domestic long hair cat. She needs vaccinated for Feline Leukemia Virus, Feline Infectious Anemia, and Feline Infectious Peritonitis.
3. Please write a prescription for 6 milliliters of penicillin to be given three times a day.
4. As a vet tech you will have to monitor temperature, pulse, and respiration, every day, every hour.
5. The test results for specific gravity, urinalysis, packed cell volume, and white blood cell count are all normal.
6. Intramuscular, intravenous, subcutaneous, and intraperitoneal are all routes to administer injections.
7. The date of birth for Max, a domestic short hair male cat, is 10/10/00.
8. The Doctor of Veterinary Medicine took a history on his patient and listened to his gastrointestinal sounds before he wrote his diagnosis.
9. Most cats are fed as much as they want, whereas dogs are usually fed twice a day.
10. The dog that arrived dead on arrival was suspected to have a central nervous system disease.

Gummy Bear Dissection

Purpose: To practice using directional terminology.

Objectives: The students will be able to apply directional terminology by dissecting a three-dimensional object.

Materials:

8 Gummy bears Plastic knives Paper Plate Napkins Tape

Procedure:

Divide each Gummy using the knife. Label on your plate and sketch the image below. Raise your hand when you finish.

Bear 1	Dorsal	Ventral
Bear 2	Anterior	Posterior
Bear 3	Cranial	Caudal

Gummy Bear Dissection:

Cut each bear according to the description in the chart. Label on your plate and sketch the image below.

Bear #	Start Position	Cut	Part 1	Part 2
4	On its legs, like how a four-legged animal stands	Cut 1 Leg	Proximal	Distal
5	On its legs, like how a four-legged animal stands	Cut along the Transverse Plane	Cranial	Caudal
6	On its side, like a four-legged animal lying down	Cut along the Frontal Plane	Dorsal	Ventral
7	On its legs, like how a four-legged animal stands with anterior facing you	Along the Median Plane to break into 2 equal halves	Left	Right
8	On its legs, like how a four-legged animal stands with anterior facing you	Along the Median Plane to break into 2 unequal halves	Left	Right

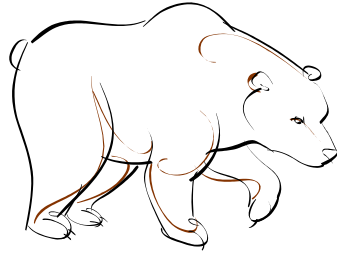
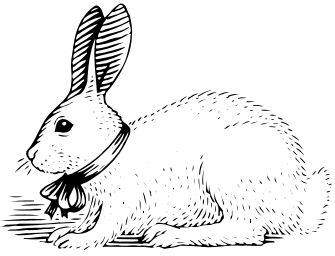
Raise your hand to be graded

Directional Terminology

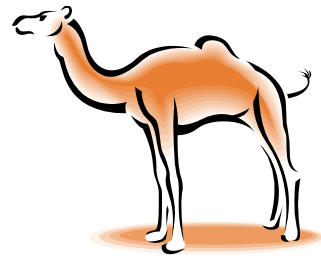
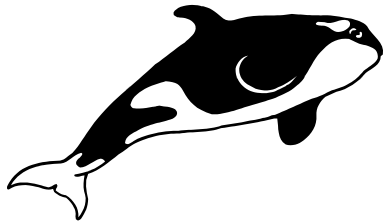
Procedure:

For each animal below, use a colored pen or pencil and label the animal with the correct directional term(s).

1. Divide these animals with a **frontal plane**.



2. Label the **dorsal** and **ventral** regions of these animals.



3. Divide these animals into a **median** and a **sagittal plane**.



4. Label these animals as being a **lateral**, **posterior**, or **anterior** view.



5. Label the **cranial** and **caudal** regions on these animals.



6. Divide these animals with a **transverse plane**.



7. Label **proximal** and **distal** on the horse's legs and the parrot's tail.

