*Exercise 1* at, from, in, with, in, with, at, at

#### Vocabulary

# 1. Look at these adjectives. Do you know the meaning of all of them? With your partner create sentences with each of them and if possible find an antonym and form a noun.

efficient oxygen-enriched digestible consciously controlled = voluntary

## fatigued = worn out=exhausted responsible connective possible

#### suggested answers

efficient - inefficient, efficiency oxygen-enriched – oxygen-deprived (oxygenpoor), deoxygenated, with low level of oxygen; (oxygen-enrichment) digestible - indigestible, digestion, digestivity !digested (undigested) vs. digestible consciously controlled=voluntary unconsciously, consciousness; involuntary,

volunteer, voluntariness

fatigued=worn out=exhausted - lively, fresh, energetic; fatigue, exhaustion responsible - irresponsible, responsibility connective - disconnective; connection, connectivity

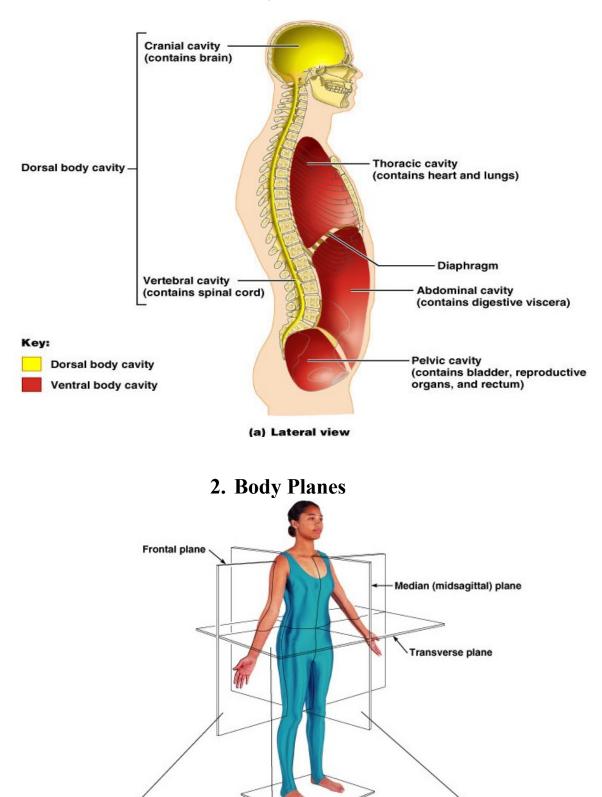
possible - impossible, possibility

### Verbs: do you see any synonyms or near synonyms?

take in	made up of	expel
absorb	remove	chew
dispose of	add	affect
consist of	bite	stop bleeding
be composed of	clot	excrete
allow	exhale	influence
nourish	permit	feed
comprise	breathe (!breath)	inhale

take in and absorb	dispose of, remove, expel, excrete			
consist of, be composed	of, comprise, be made up of	allow, pe	ermit	nourish, feed
bite, chew	clot, stop bleeding	exhale, b	reathe, inhale	affect, influence

## 1. Body cavities



(a) Frontal section through torso (superior view) (c) Median (midsagittal) section

# 3. Directional terms

Term	Definition	Example	
Superior (cranial)	Toward the head end or upper part of a structure or the body; above		The head is superior to the abdomen
Inferior (caudal)	Away from the head end or toward the lower part of a structure or the body; be- low		The navel is inferior to the chin
Anterior (ventral)*	Toward or at the front of the body; in front of		The breastbone is anterior to the spine
Posterior (dorsal)*	Toward or at the back of the body; behind		The heart is posterior to the breastbone
Medial	Toward or at the midline of the body; on the inner side of	A	The heart is medial to the arm

"Whereas the terms ventral and anterior are synonymous in humans, this is not the case in four-legged animals. Ventral specifically refers to the "belly" of a vertebrate animal and thus is the inferior surface of four-legged animals. Likewise, although the dorsal and posterior surfaces are the same in humans, the term *dorsal* specifically refers to an animal's back. Thus, the dorsal surface of four-legged animals is their superior surface.

Term	Definition	Example	
Lateral	Away from the midline of the body; on the outer side of		The arms are lateral to the chest
Intermediate	Between a more medial and a more lateral structure		The collarbone is intermediate between the beastbone and shoulder
Proximal	Closer to the origin of the body part or the point of attachment of a limb to the body trunk		The elbow is proximal to the wrist
Distal	Farther from the origin of a body part or the point of attachment of a limb to the body trunk		The knee is distal to the thigh
Superficial (exter- nal)	Toward or at the body surface	¥	The skin is superficial to the skeletal muscles
Deep (internal)	Away from the body surface; more internal	R	The lungs are deep to the skin

http://homepage.smc.edu/wissmann\_paul/anatomy1textbook/1anatomytextch1.html

abdomen	abdominal	front of elbow
arm	brachial	groin
armpit	axillary	head
back	dorsal	hip
back of head	occipital	cheek
back of knee	popliteal	chest
between hips	sacral	chin
breast	mammary	instep
breastbone	sternal	leg
buttocks	gluteal	lower back
ear	otic	navel
elbow	cubital	neck
finger	digital	reproductive organs
foot	pedal	sole
forearm	antebrachial	spinal column
forehead	frontal	thigh
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front of elbow	antecubital
groin	inguinal
head	cephalic
hip	coxal
cheek	buccal
chest	pectoral
chin	mental
instep	tarsal
leg	crural
lower back	lumbar
navel	umbilical
neck	cervical
reproductive organs	genital
sole	plantar
spinal column	vertebral
thigh	femoral
wrist	carpal

2. Complete the sentences:

The \_\_\_\_ventral (abdominal and pelvic)\_\_\_\_\_ cavity contains the digestive, excretory, and reproductive organs.

The \_\_\_\_\_dorsal/vertebral\_\_\_\_\_ cavity contains the spinal cord.

The \_\_\_\_\_ventral/thoracic\_\_\_\_\_\_ cavity contains the heart, lungs, and associated structures.

The \_\_\_\_\_dorsal/cranial \_\_\_\_\_\_ cavity contains the brain.

3. Complete the sentences:

The \_\_\_\_\_median/midsagittal\_\_\_\_\_\_plane divides the body into a right and left half.

The \_\_\_\_\_sagittal/parasagittal\_\_\_\_\_\_ plane divides the body into an unequal right and left side.

The \_\_\_\_\_frontal/coronar\_\_\_\_\_\_ plane divides the body into an anterior and posterior portion.

3. Match the corresponding terms and their directions.

1-L, 2-H, 3-D, 4-G, 5-F, 6-J, 7-I, 8-C, 9-E, 10-B, 11-K, 12-A

#### 5. see the table above