Intro to Anatomy Review Sheet
Anatomy/Physiology

Name Answer Key Date _____ Per ___

Medical Cases:

1. John has been suffering agonizing pain with each breath and has been informed by the physician that he has pleurisy.
   a. Specifically, what membranes are involved in this condition? pleural membranes
   b. What is their usual role in the body? allow organs to slide easily w/o friction
   c. Explain why John's condition is so painful. Organ membranes stick together, rub, creat friction, heat + pain!
2. At the clinic, Harry was told that blood would be drawn from his antecubital region.
   a. What body part was Harry asked to hold out? inside of the elbow.
   b. Later, the nurse came in and gave Harry a shot of penicillin in the area just distal to his acromial region. Did Harry take off his shirt or drop his pants to receive the injection? Shirt
   c. Before Harry left, the nurse noticed that Harry had a nasty bruise on his gluteal region. What part of his body was black and blue? his buttucks!
3. Calcium levels in Mr. Gallariani's blood are dropping to dangerously low levels. The hormone PTH is released and soon blood calcium levels begin to rise. Shortly after, PTH release slows.
   a. Is this an example of a positive or negative feedback mechanism? negative
   b. What is the initial stimulus? low blood calcium
   c. What is the result? normal blood calcium and eventual slow/stop of PTH release
4. Mr. Harvey, a computer programmer, has been complaining of numbness and pain in his right hand. The nurse practitioner diagnosed his problem as carpal tunnel syndrome and prescribed the use of a splint.
   a. Where will Mr. Harvey apply the splint? wrist

Anatomical Terms Practice:

Word Bank:

A. Anterior (ventral)	B. Distal	C. Frontal	D. Inferior	E. Lateral	F. Medial	G. Posterior (dorsal)	H. Proximal
I. Sagittal	J. Superior	K. Transverse					

In the anatomical position, the face and palms are on the anterior (1) body surface, the buttocks and shoulder blades are on the posterior (2)body surface, and the top of the head is the most Superior (3)part of the body. The ears are superior (4) to the shoulders and lateral (5) to the nose. The heart is anterior (6) to the spine and medial (7) to the lungs. The elbow is proximal (8) to the fingers but distal (9) to the shoulder. In humans, the dorsal surface can also be called the posterior (10)surface; however in four-legged animals, the dorsal surface is the superior (11) surface. If an incision cuts the heart into right and left parts, the section is a sagittal (12) section, but if the heart is cut so that anterior and posterior parts result, the section is a frontal (13)section. You are told to cut an animal along two planes so that the paired kidneys are observable in both sections. The two sections that meet this requirement are the frontal (14) and transverse (15)sections.

What is the anatomical term for each of the following areas?

1. axillary Armpit
2. femoral Thigh region
3. gluteal Buttock area
4. cervical Neck region
5. umbilical "belly button" area
6. genital/pubic Genital area
7. antecubital Anterior aspect of the elbow
8. occipital Posterior aspect of the head
9. pelvic Area where trunk meets thigh
10. lumbar back area from ribs to hips
11. buccal Pertaining to the cheek
12. mental the chin
13. coxal the hips
14. otic the ears

Using the key choices, identify the body cavities where the following body organs are located. Enter the appropriate letter or term in the answer blanks

Key Choices: A. abdominopelvic B. Cranial C. Spinal D. Thoracic E. Pericardial F. Pleural

abdominopelvic 1. Stomach
abdominopelvic 2. Small intestine
abdominopelvic 3. large intestine
abdominopelvic 4. Spleen
abdominopelvic 5. Liver
Spinal 6. Spinal cord
abdominopelvic 7. Bladder
Thoracic 8. Trachea
Thoracic / Pleural 9. Lungs
Cranial 10. Pituitary gland
abdominopelvic 11. Rectum
abdominopelvic 12. Ovaries
Thoracic / pericardial 13. Heart
Cranial 14. Brain

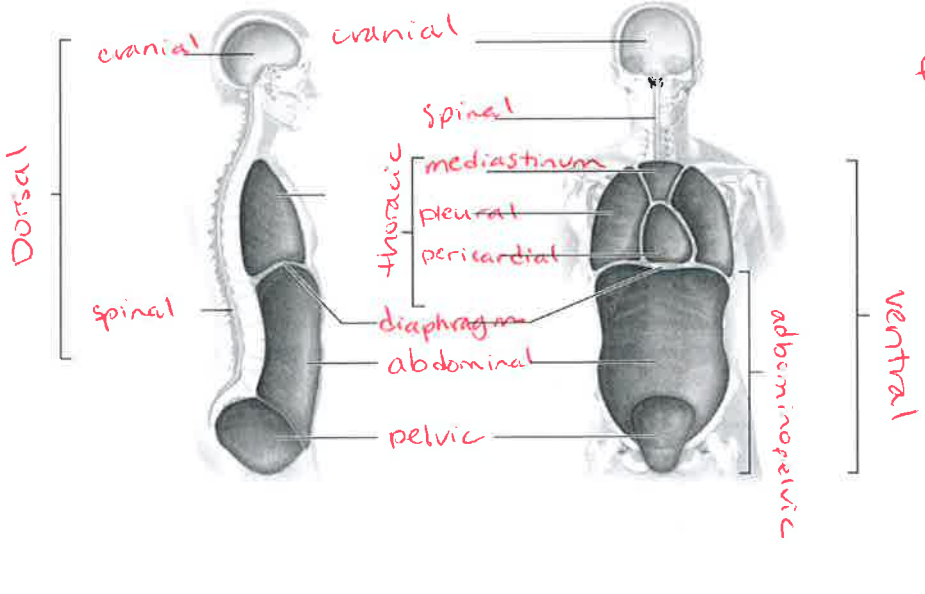
Refer to the organs listed in the previous exercise. In the spaces provided, record the numbers of the organs that would be found in each of the abdominal regions names here. Some organs may be found in more than one abdominal region.

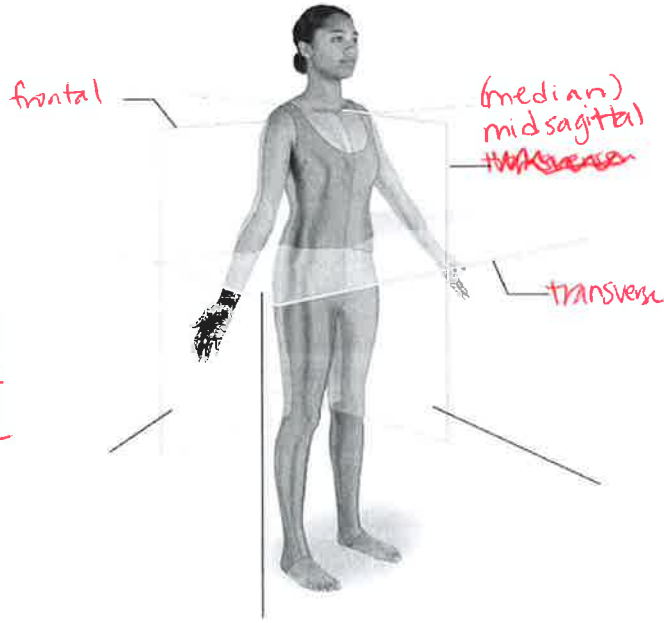
~~Stomach, liver~~ small intestine, colon 1. Hypogastric region
large & small intestine 2. Right lumbar region
small intestine 3. Umbilical region
Stomach, liver 4. Epigastric region
large intestine 5. Left iliac region

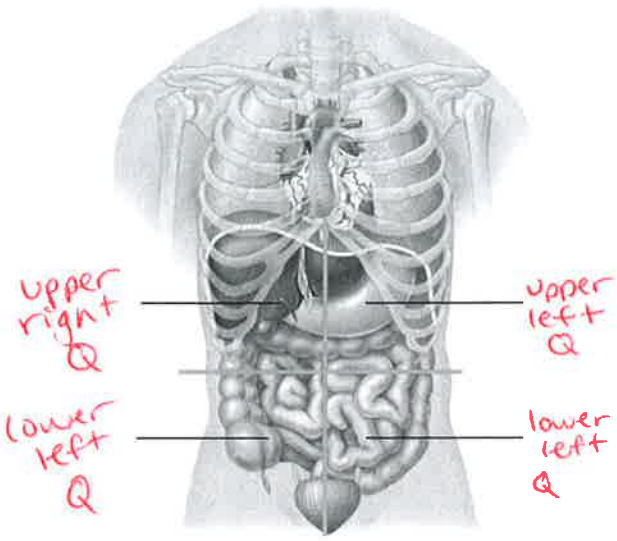
Short Answer:

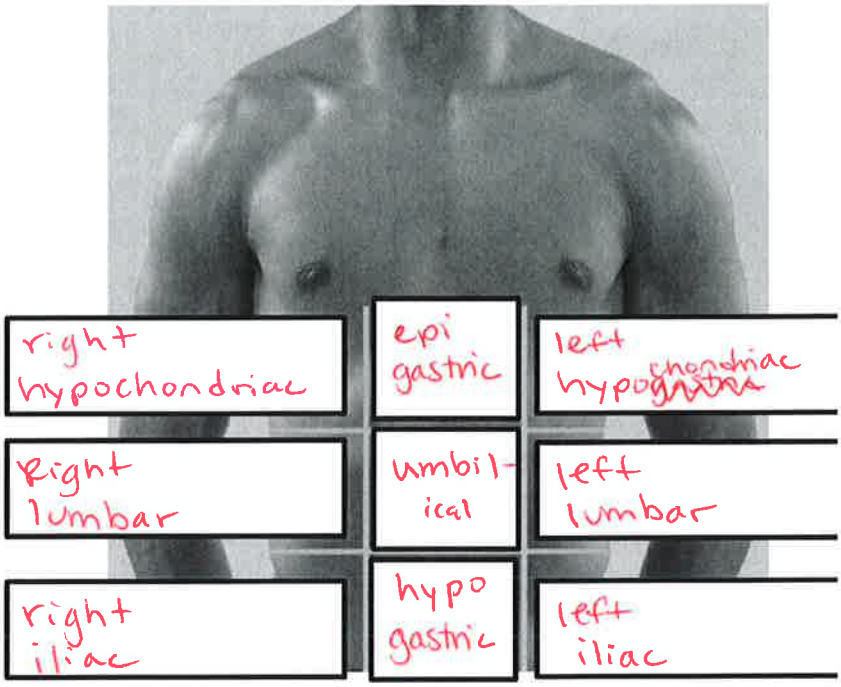
1. What is the difference between anatomy and physiology, and why are they so difficult to separate?
   anatomy - parts (by observation) physiology - function (by experiment) to study one you need (or at least want) to know the other
2. How has the study of anatomy and physiology changed through time?
   Used to be taboo to cut bodies so all the information was very wrong. As culture and technology change, more discoveries were made and now we know lots.
3. What are some modern technologies that aid in studying anatomy and physiology?
   MRI, CAT/CT scans, ultrasound
4. If a meteor crashed on Earth and was found to house a small, cell-like structure, what qualities would you test for to see if this thing is alive or not? metabolism, responsiveness, growth, reproduction movement, digestion, may be test the 5 requirments (heat, food, water air + pressure)

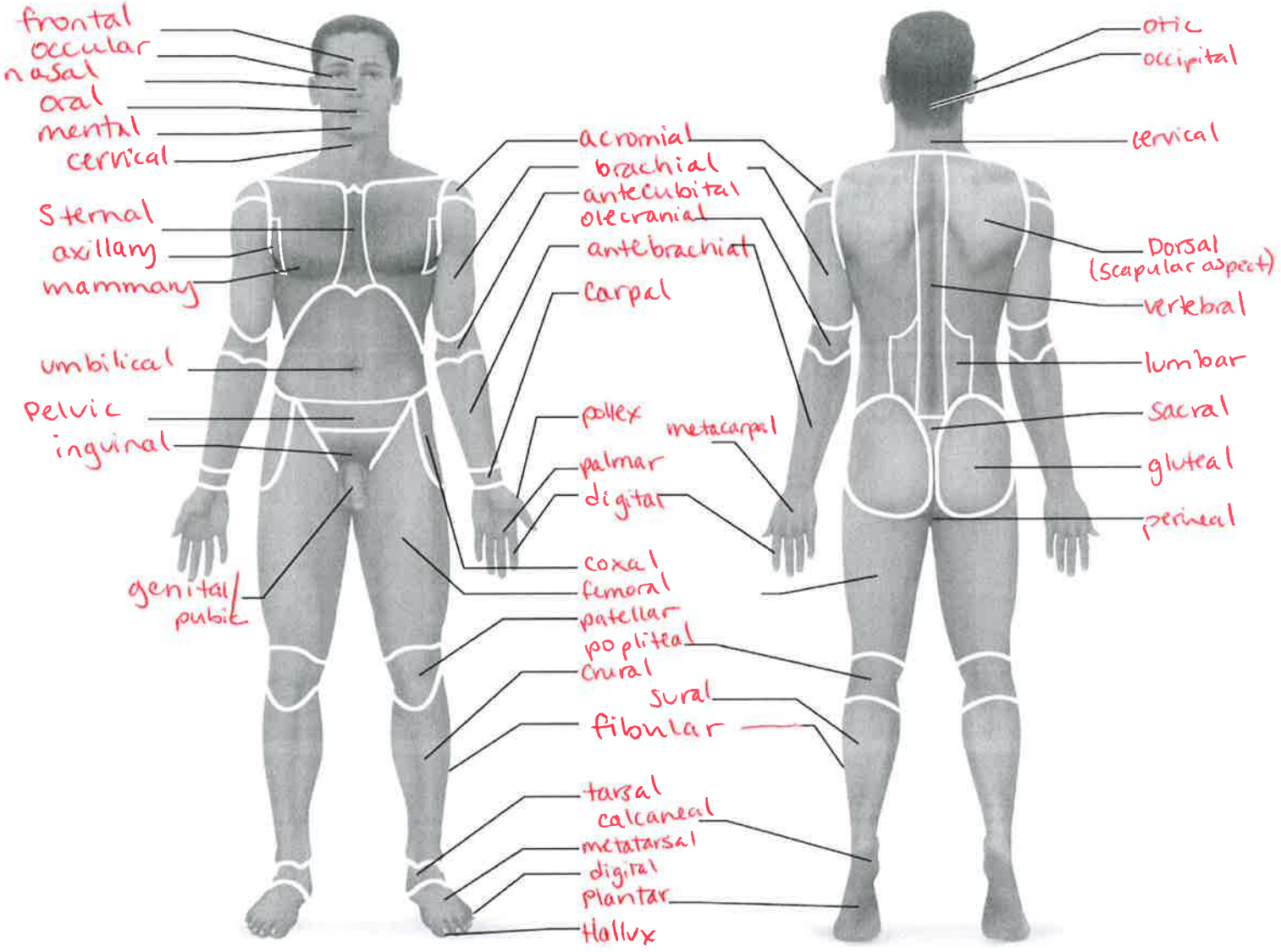
Labeling:






upper right Q
upper left Q
lower left Q
lower left Q


right hypochondriac
epi gastric
left hypochondriac
Right lumbar
umbil- ical
left lumbar
right iliac
hypo gastric
left iliac


frontal
occular
nasal
oral
mental
cervical
Sternal
axillary
mammary
umbilical
Pelvic
inguinal
genital/ pubic
acromial
brachial
antecubital
olecranial
antebrachial
carpal
pollex
palmar
digital
metacarpal
coxal
femoral
patellar
popliteal
Crural
fibular
sural
tarsal
calcaneal
metatarsal
digital
plantar
Hallux
otic
occipital
cervical
Dorsal (scapular aspect)
vertebral
lumbar
sacral
gluteal
perineal