Review of the Basics

1. Define

a. Anatomy - cut up - the (usually) static structures that make up the body.
b. Physiology - study of the function/workings of the body. usually molecular/chemical and dynamic. defined in terms of anatomical structures
c. Sagittal Plan - vertical plane severing the body into left and right parts.
d. Frontal Plane - vertical plane severing the body into anterior and posterior parts
e. Transverse Plane - horizontal plane severing the body into superior and inferior parts
f. Superficial - closer to the surface of the body
g. Deep - further inside the body, away from the surface
h. Proximal - near the point of attachment to the trunk.
i. Distal - further away from the point of attachment to the trunk
j. Superior - above, on top of, more cephalic
k. inferior - below, underneath, more caudal
l. Anterior - towards the front, in front of. in quadrupeds, similar to rostral
m.Posterior - towards the back, behind. in quadrupeds, similar to caudal
n. medial - towards a sagittal/centerline
o. lateral - away from a sagittal/centerline
p. intermediate - between medial and lateral
q. homeostasis - trying to maintain a relatively unchanging internal environment apart from a dynamic external environment.

2. What are the levels of structural organization?

chemical - atoms, molecular, organelle
cellular,
tissue- groups of similar cells working together
organ - 2-4 tissue types working together
organ system - 11 systems of organs working together
organism - all the systems working together

3. What are the main functions of the following organ system?

a. Integumentary - to cover and provide the boundary between internal and external environments for the organism. external body covering, protect deeper tissues from injury, synthesizes vitamin D, houses cutaneous (pain, pressure, etc) receptors, sweat/oil glands
b. Skeletal - provide a framework for the entire body, provide levers for the muscular system to work against/with, hematopoiesis, Ca and P reservoir
c. Muscular - provide organism movement (internal and external) including manipulation and locomotion
d. Nervous - primary control system. provides irritability to the external and internal environments
e. Urinary.- balance water and electrolyte
f. Cardiovascular - provide an internal transport system so the body's specialized components can communicate and help each other
g. Lymphatic - provide immune response and clean up waste at the cellular and histological level
h. Respiratory - get O2 and eliminate Co2 waste
i. Digestive - absorb nutrients from food
j. Reproductive - provide the ability for the organism to reproduce.

4. Name the 8 functions necessary for life.

maintain boundaries, movement, irritability , digestion, metabolism, excretion, reproduce, growth

5. What are the three components of Homeostatic control mechanisms? Explain.

receptor- sensor for environment, responds to changes/stimuli
control center - determines setpoint - range/level we want variable at
effector - carries output to stimulus

6. Explain negative and positive feedback. Give examples.

negative feedback is a way for the body to keep a parameter in a relatively narrow band of acceptable values by pressing opposing forces against each other.

positive feedback is a self reinforcing drive that will end abruptly. its job is to spiral a reaction to an extreme before it is terminated.

7. Explain anatomical position.
   standing, arms to the side, palms forward, feet slightly apart

8. Parietal Pleura line the thoracic cavity for the lungs

9. Visceral Pericardium line the sac for the heart.

10. name the 9 abdominopelvic regions
    right hypochondriac, epigastric, left hypochondriac,
    right lumbar, umbilical, left lumbar
    right inguinal/iliac, hypogastric/pubic, left inguinal/iliac