**Orientation: The Language of Anatomy Notes**

Anatomy- the study of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of body parts.

**Gross/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

-Regional

-Systemic

**Microscopic**

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-anatomy of \_\_\_\_\_\_\_\_\_\_

-Histology-anatomy of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Physiology**

-the study of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the structural parts

-Operations of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ systems and between cells

-involves chemistry and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-chemical concentrations, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ currents, pressures and

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Principle of Complementarity**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always reflects structure: “\_\_\_\_\_\_\_\_\_\_\_ follows function”

Structural Organization Levels: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 molecules 🡪 \_\_\_\_\_\_\_\_ 🡪 tissues 🡪

Organs🡪 organ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 organism

**Functions of Life**

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_ boundaries, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, response to stimuli, digestion, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, excretion, reproduction, \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Maintaining Life: nutrients, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, water, normal body temperature, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pressure

**Homeostasis**

-the ability to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a relatively stable internal condition as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ conditions change

Homeostasis is controlled primarily by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and nervous systems.

-stimuli 🡪 receptor 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pathway🡪 control center 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pathway 🡪 effector

**Feedback Control**

-Negative feedback- effector turns stimuli \_\_\_\_\_\_\_\_\_  
 -Positive Feedback- effector makes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stronger

**Anatomical Position**

-body \_\_\_\_\_\_\_\_\_\_\_\_, limbs extended

-palms facing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and feet together

**Surfaces of the Body**

Front= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or ventral surface

Back= posterior or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ surface

Side= \_\_\_\_\_\_\_\_\_\_\_\_\_ surface

**Planes (cuts/sections)**

-Sagittal:

-Midsagittal-plane divides body into two equal right and left \_\_\_\_\_\_\_\_\_\_\_

-Parasagittal-plane \_\_\_\_\_\_\_\_\_\_\_\_\_ to midsagittal plane (unequal halves)

-Transverse

-divides body into \_\_\_\_\_\_\_\_\_\_\_\_ and lower parts

-superior and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (same as horizontal)

-Frontal (Coronal)

-divides body into anterior and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ parts (front and back)

**Position**

-lateral-towards the \_\_\_\_\_\_\_\_\_\_\_\_ of the body

-medial-towards \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the body

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_= above (towards head)

-inferior= \_\_\_\_\_\_\_\_\_\_\_\_\_ (towards feet)

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_=near beginning of limb

-distal=near end of \_\_\_\_\_\_\_\_\_\_\_\_

-superficial= near surface (ex: skin)

-\_\_\_\_\_\_\_\_\_\_\_\_\_=deep to surface (ex: muscle)

**Cavities**

-Lined by membranes

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ against cavity wall= **parietal**

-membrane against \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_= **visceral**

-Dorsal cavity

-cranial (brain)

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (vertebral)

-Ventral cavity:

-Thoracic cavity:

-pericardial

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Abdominopelvic:

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (stomach, intestines, liver, pancreas)

-pelvic (contains gonads)

**Quadrants**

-the abdominopelvic cavity is divided into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-upper right -upper \_\_\_\_\_\_\_\_\_\_\_\_

-lower \_\_\_\_\_\_\_\_\_\_ -\_\_\_\_\_\_\_\_\_\_\_\_ left

**Regions:**

right hypochondriac epigastric left hypochondriac

Right \_\_\_\_\_\_\_\_\_\_\_ umbilical left lumbar

Right iliac \_\_\_\_\_\_\_\_\_\_\_\_\_\_ left iliac

**Radiography**

**-X-rays:** \_\_\_\_\_\_\_\_\_\_\_\_\_ electromagnetic waves. Dense structures \_\_\_\_\_\_\_\_\_\_\_\_\_\_ x-rays=light parts that you see. Fat, hollow areas absorb \_\_\_\_\_\_\_\_\_\_\_=dark

**-CT**-computerized \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It forms a dime thin transverse \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It eliminates images of overlapping structures

**-DSR-**dynamic \_\_\_\_\_\_\_\_\_\_\_\_\_\_ reconstruction. It provides physicians with a 3-D image. It shows \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ movement and volume (ex: heart)

**-DSA**-digital \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angiography-it is used to ID \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (blood clots). Example: pulmonary embolism (clot in lung), clot in the leg, etc. It is also called an angiogram

**-PET**-positron \_\_\_\_\_\_\_\_\_\_\_\_\_\_ topography. Tagged \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are absorbed by the most \_\_\_\_\_\_\_\_\_\_\_\_ brain cells. It gives a live action \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of brain activity. It is used for \_\_\_\_\_\_\_\_\_\_\_\_, epilepsy, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, huntington’s disease etc. It can be used for the lungs to identify things like lung cancer

Sonography

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-uses sound waves, \_\_\_\_\_\_\_\_\_\_\_\_. Little value at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ air filled structures. It is safe and cheap. It can be used in the abdomen, heart, pregnancy, in joints etc.

**Magnetic Resonance Images**

-subjects the body to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fields up to 60,000X stronger than the Earth’s magnetic \_\_\_\_\_\_\_\_\_\_\_\_\_. It can be dangerous if a patient has shrapnel in their eye or in other areas of the body. It makes H2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ spin, enhancing their energy. It \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into a high contrast image of soft \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is good for \_\_\_\_\_\_\_\_\_\_\_ tissue (containing most H2O). It can see the difference between \_\_\_\_\_\_\_\_\_\_\_\_ white matter and gray matter (ex: brain). It can see nerves un the spinal \_\_\_\_\_\_\_\_\_\_\_\_ and the dense skull does not \_\_\_\_\_\_\_\_\_\_\_\_\_. It can detect tumors and degenerative diseases such as Huntington’s, Alzheimer’s disease. It can be used in joints such as the shoulder and knee as well to look for abnormalities.