

1. FQ: How do we define homeostasis?
2. FQ: What is feedback?
3. FQ: How do you differentiate between different types of feedback?

Roles for Today:

A – Facilitator

B – Spokes Person

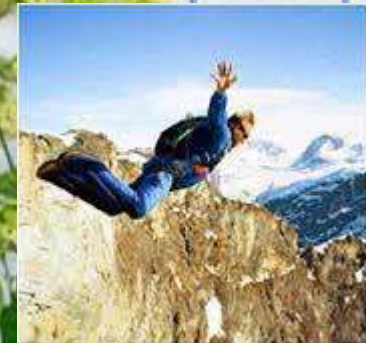
C – Quality Control

D – Process Analyst

Ch. 1 Homeostasis

- FQ: What situations require positive feedback, and what situations require negative feedback?
- FQ: In a specific feedback loop, what is the stimulus, control center, and effector pathway?

Entry Task: Pick up a copy of the reading from the front. Silently read the entire handout



Homeostasis: maintaining a constant internal environment



What are some things that your body does for you each day?

- Gives you energy
- Digest food
- Maintains your temperature
- Regulates your blood pressure
- Regulates your blood sugar

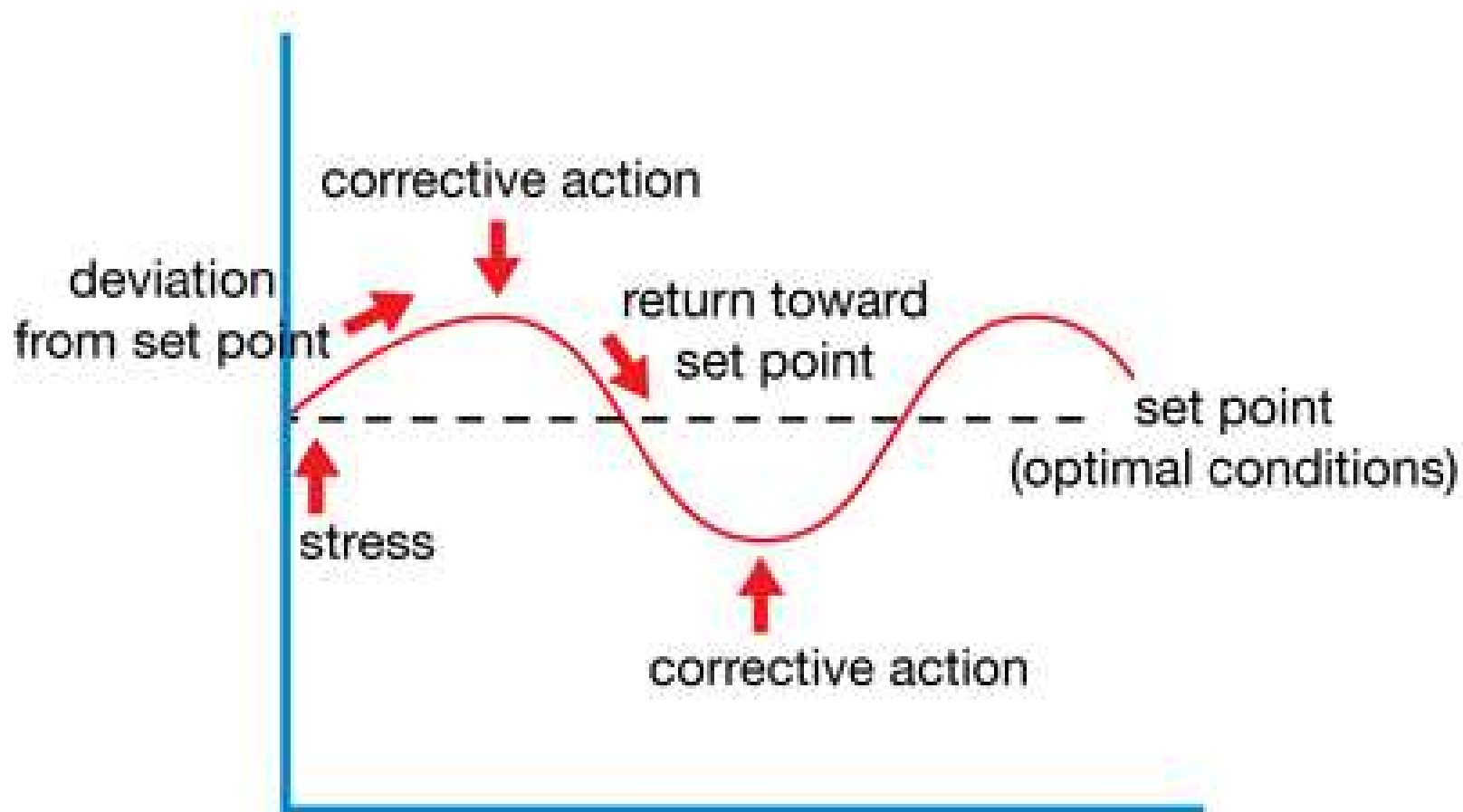


Homeostasis – How it works

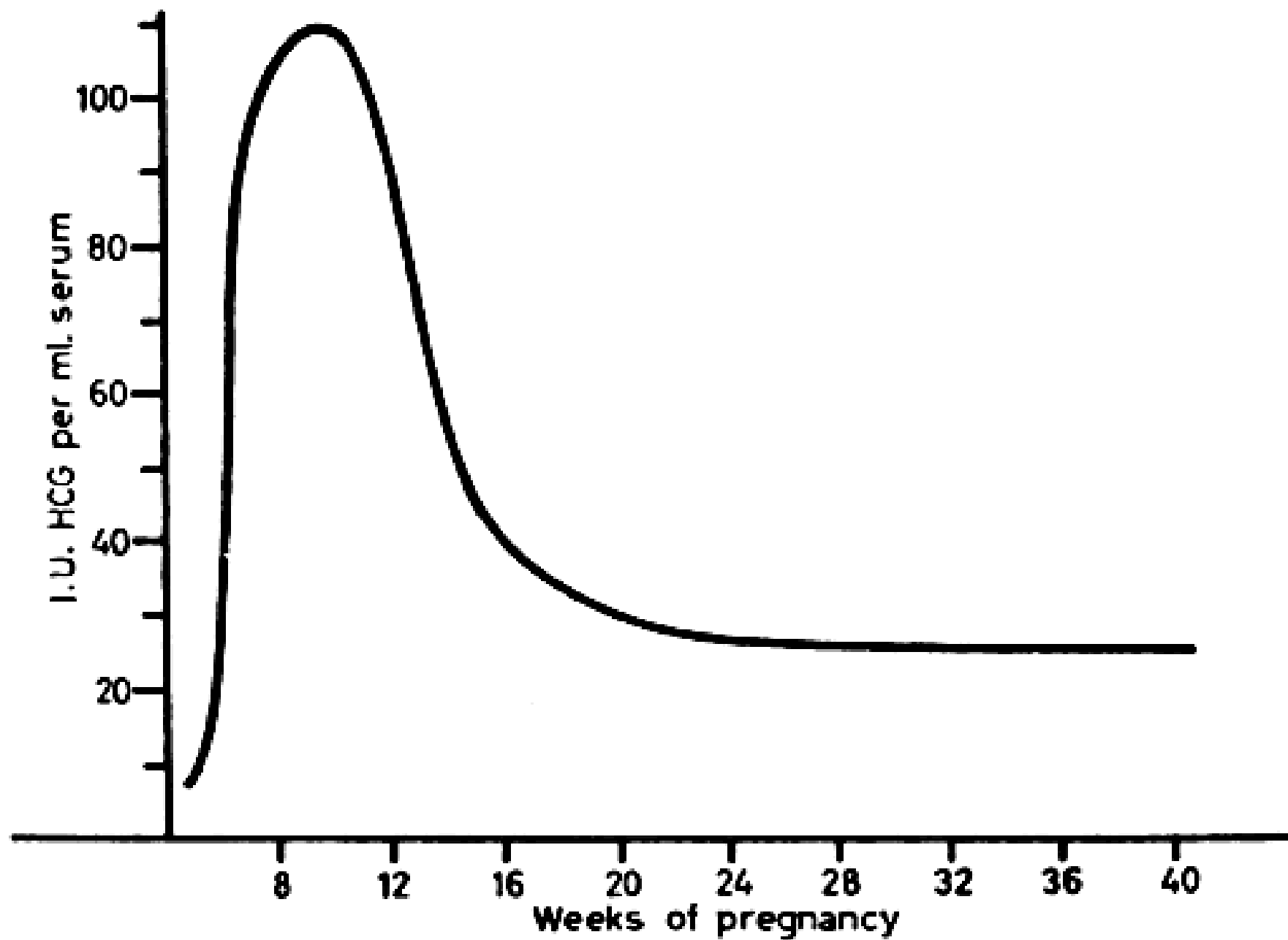
- **Positive feedback loops**
 - **Positive:** this type of feedback loop moves a variable farther from its original value
 - **Negative:** this type of feedback loop reduces a stimulus or reduces its intensity, moving the variable's original value

HORMONES

Regulation Through Negative Feedback



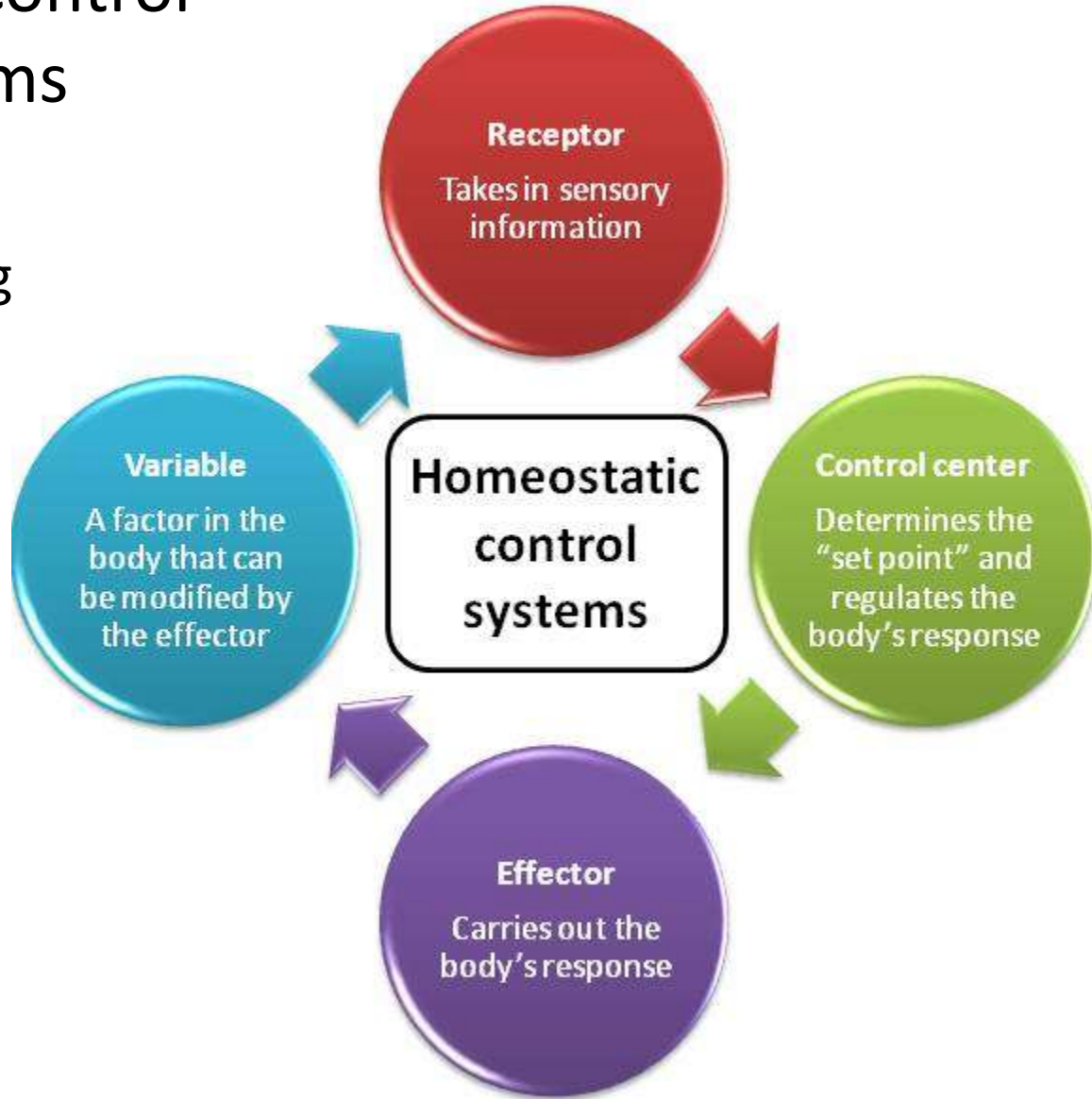
- Stress or disturbance changes the internal environment.
- Change is detected by receptors.
- Corrective measures are activated.
- Corrective measures counteract the change back toward set point.



Homeostatic Control Mechanisms

- 3 Parts

1. Receptor: Something that monitors and responds to changes
2. Control center: Controls/maintains regular levels, analyzes the information it receives and determines the next course of action
3. Effector: The means/path for the control center's response



Lets break it down...

- Your group will be assigned something that is regulated by your body through one of two types of homeostatic controls
- Differentiate between the two and decide together what type you have (- or +)
- Together decide what the variable, stimulus, receptor, control center, and effector path are (this can be a generalization. We do not need the details of the pathway explained)

- LT: Today I will...
 - Practice observing homeostasis in action
 - Observe differences in a bodies response time
 - Identify relationships between body systems

- **ET: Did we finish our poster rotation?**





Review

***Quiz on homeostasis**

***Bring note cards to class from now on**

Quiz

- What are the three parts of a homeostatic control mechanism? Explain each part.
- Reflection: did the group activity help you answer the above question? Did you work well as a group? What could you have done differently? What would have made it more enriching for you?

Lets Explore Directional Terms!

- Using the terms provided, work as a group to complete the sentences.
- Example: The fingers are _____ to the elbow.



Want the answers?

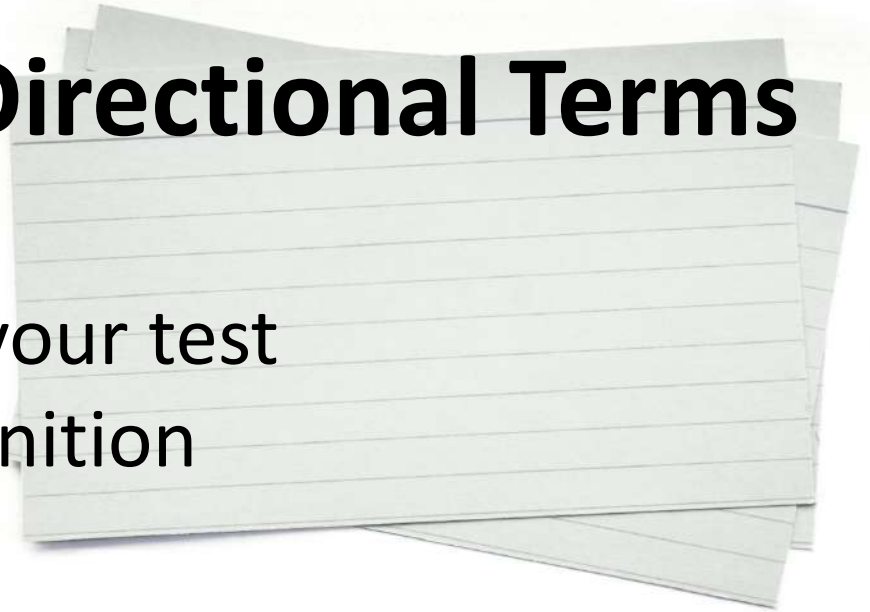
- Now that you have the answers, use the sentences and your diagrams to develop your own definitions for each term.

***Be ready to share**



Note Cards for Directional Terms

- Using pages 12-14 in your test book, look up the definition for each word
- Check your own definition
- Create a note card with a definition you have developed on one side, and the directional term on the other



Directional Terms

- LT: today I will...
 - Use directional terms correctly in a dissection

Safety: gloves,
goggles, apron,
whole shoes

- ET: take out your note cards and review terms before we start the dissection

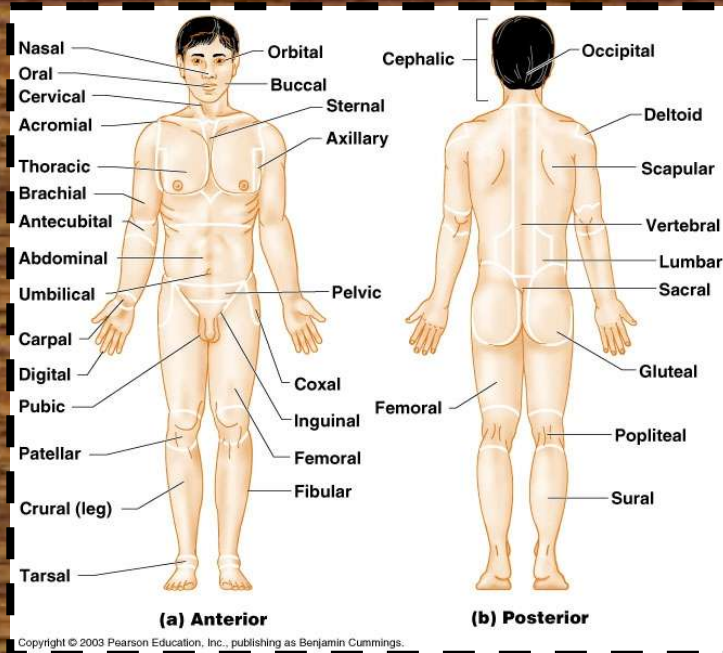


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***Bring note cards to make surface anatomy term cards**

- LT: Today I will...
 - Use directional terms to describe location of anatomical parts
 - Identify key surface anatomy terms

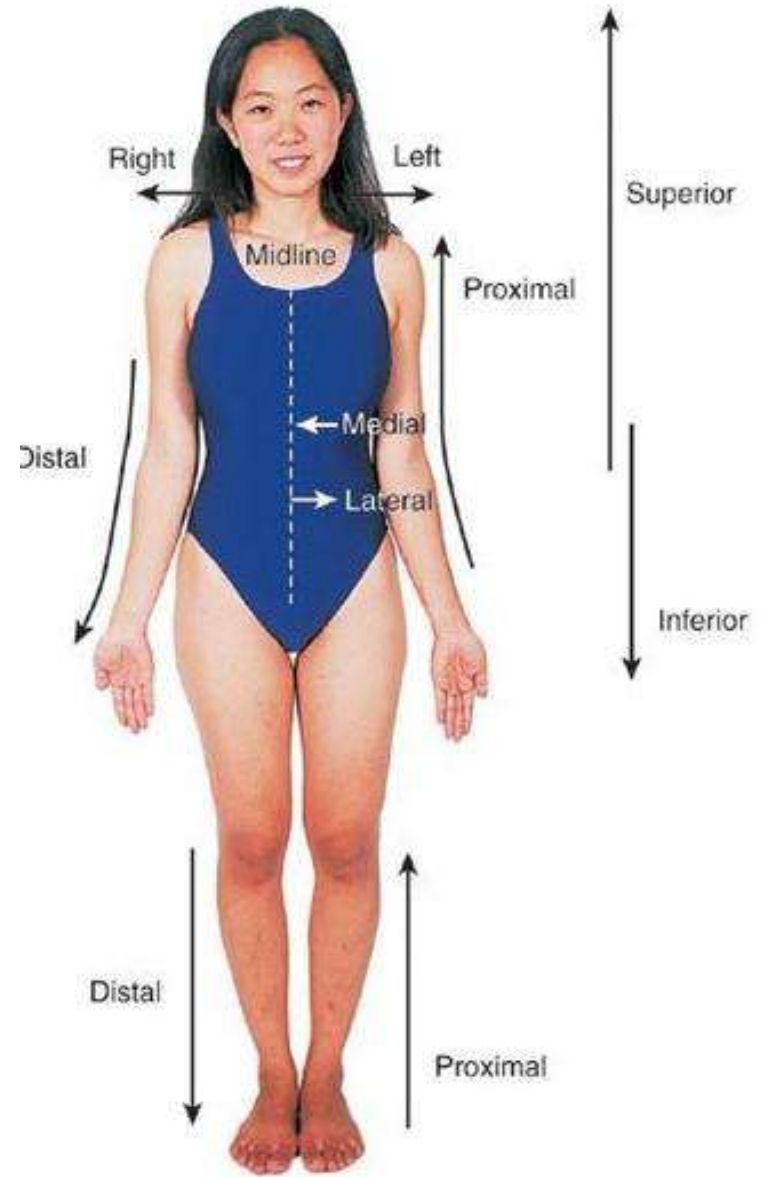
- ET: With a partner, you are going to use your directional term note cards to build sentences.
 - Get a sentence ½ sheet
 - As your partner holds up a card, you must correctly use that term in a sentence. Write it down on sentence ½ sheet



We will use your sentences in 20 min.

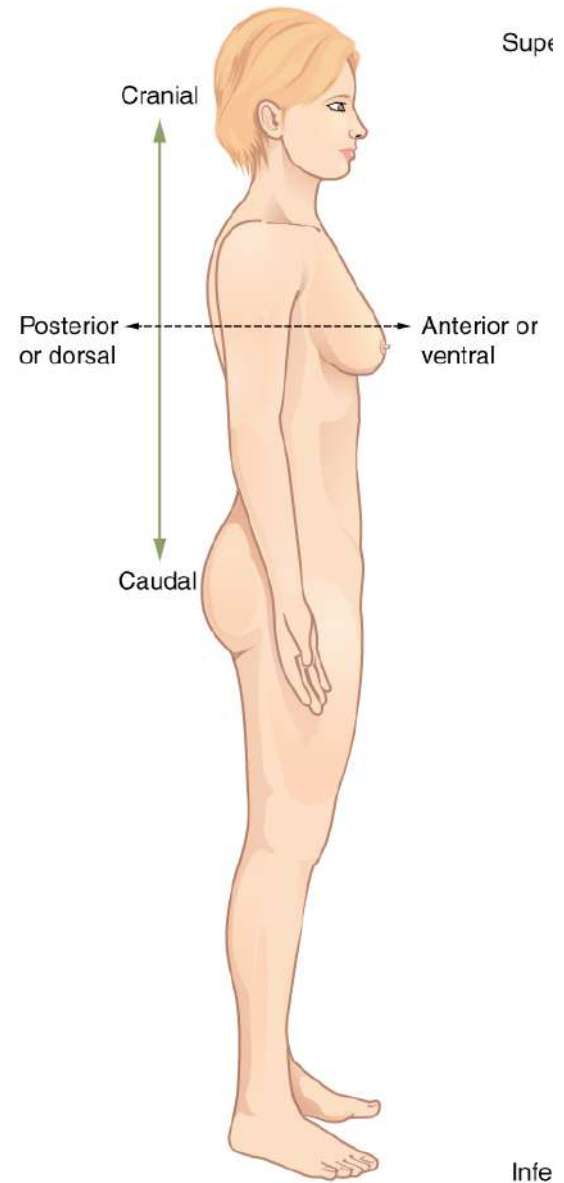
Superior and Inferior

- Superior – toward the head end, above something else
- Inferior – away from the head, below something else



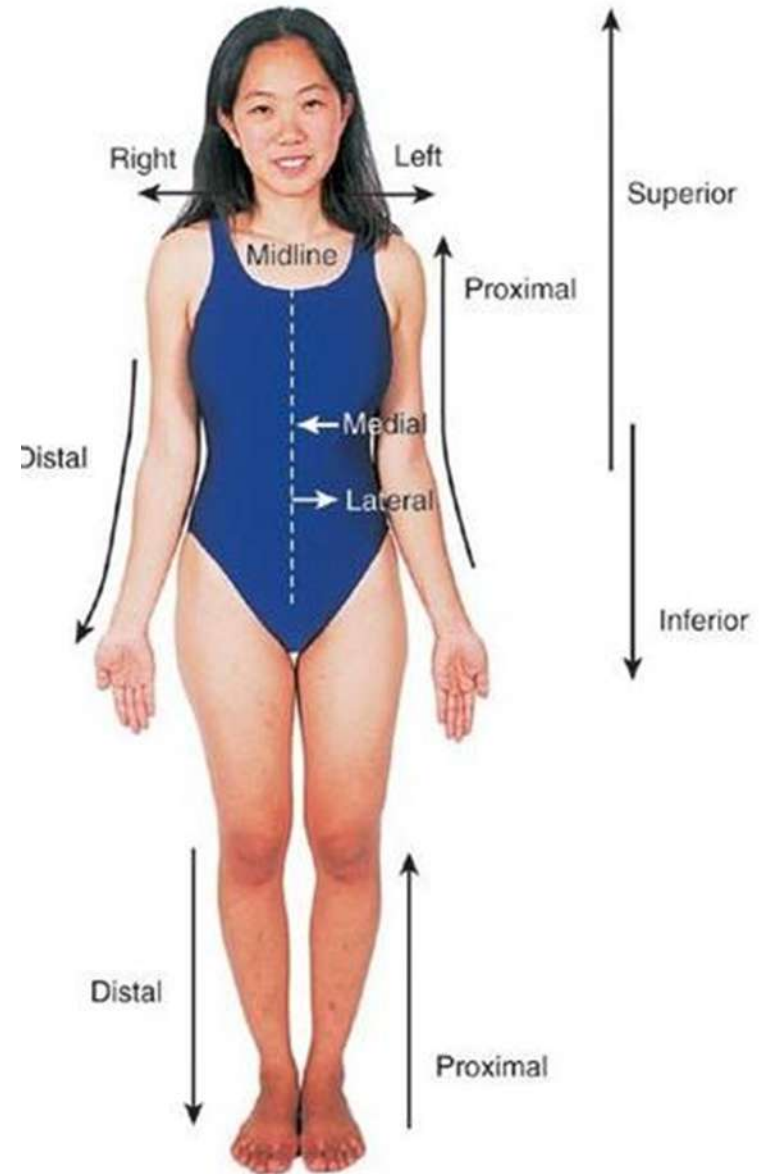
Anterior and Posterior

- Anterior: Toward or at the front / in front of something else *ventral
- Posterior: Toward or at the backside / behind *dorsal



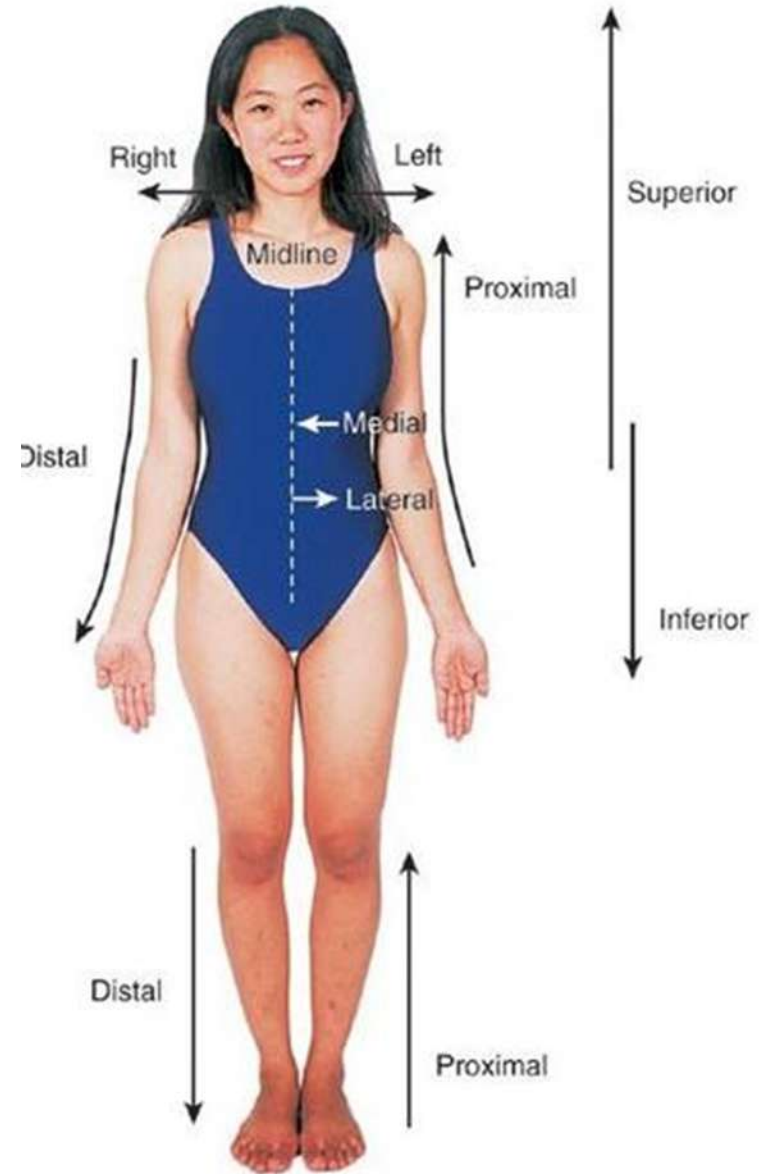
Medial and Lateral

- Medial: toward or at the midline / to the middle
- Lateral: away from the midline / to the sides



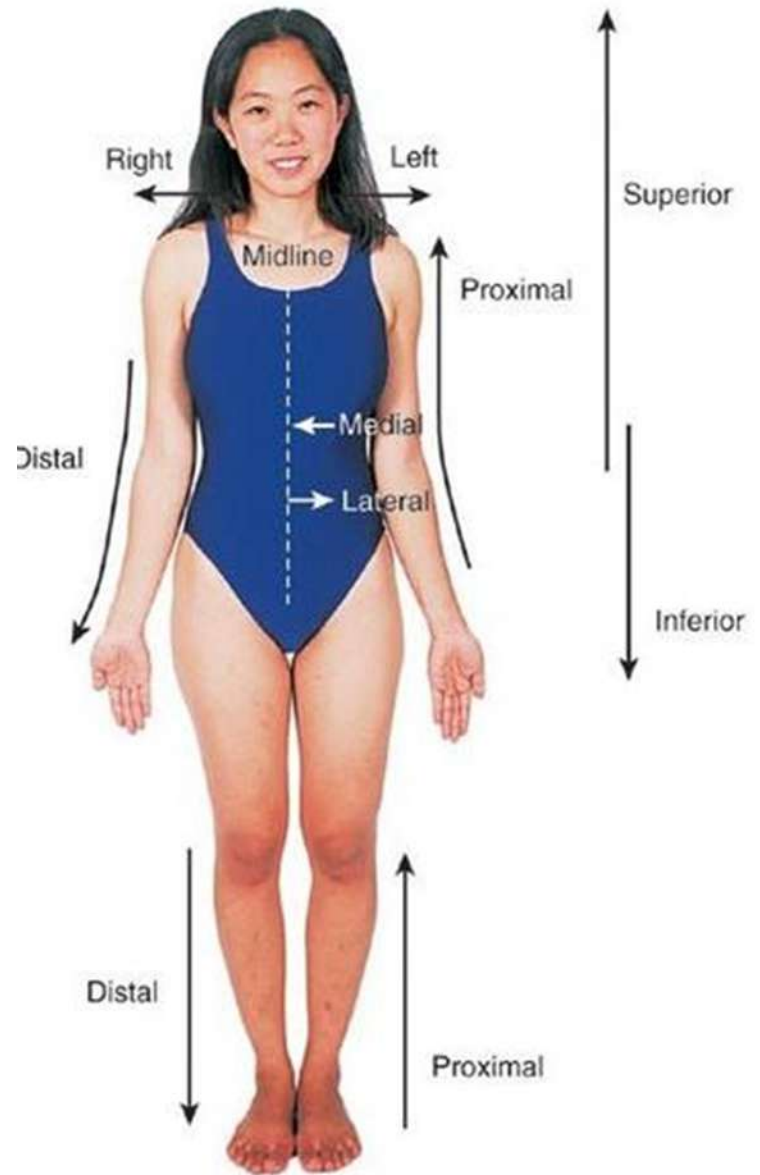
Intermediate

- Between a more medial and a more lateral structure



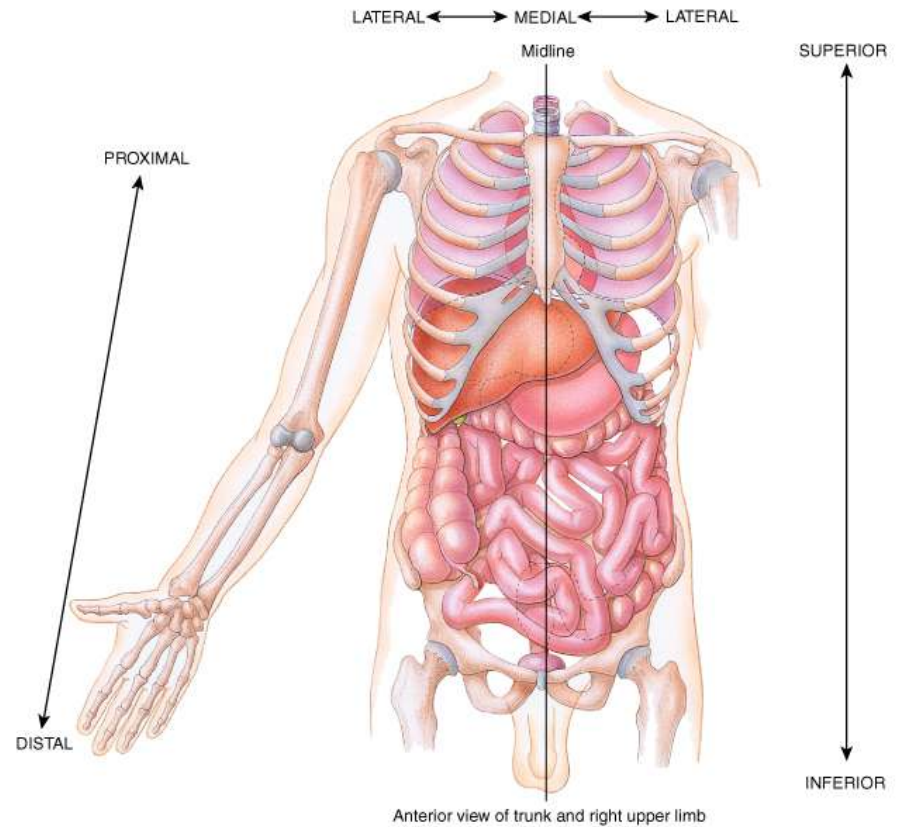
Proximal and Distal

- Proximal: closer to the point of attachment of a limb to the trunk of the body
- Distal: away from the point of attachment of the limb to the trunk of the body



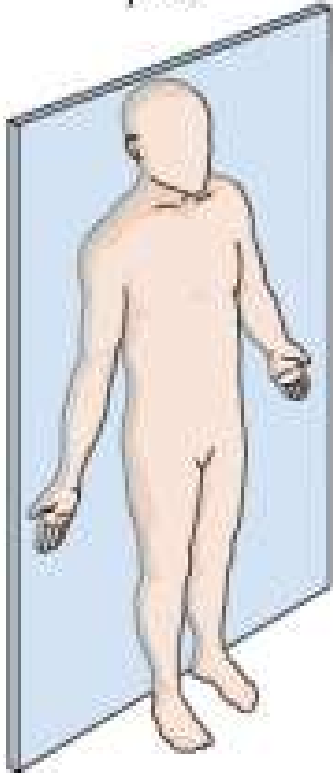
Superficial and Deep

- Superficial:
Toward or at the
body surface
- Deep: Away from
the body surface
or more internal

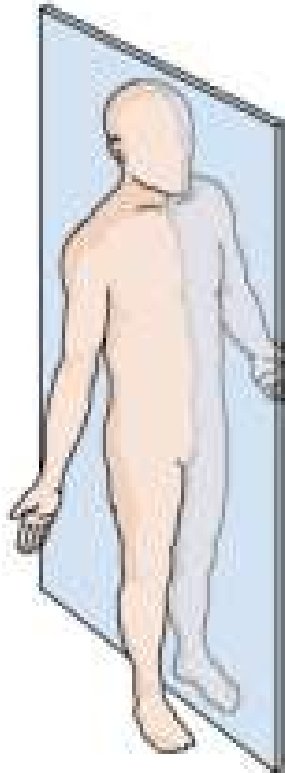


Planes of the Body

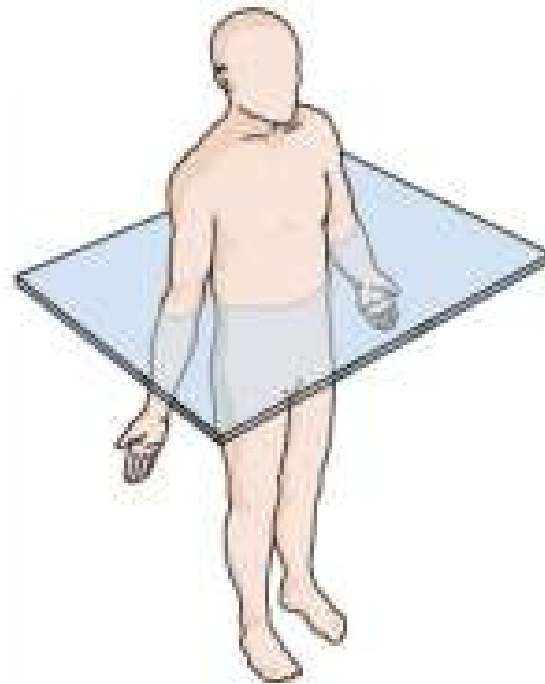
Frontal
(coronal)
plane



Sagittal
plane



Transverse
(horizontal)
plane



Anatomical Terms for body parts

Note Cards

1. You will need 15 note cards
2. Cut your cards in half so that you have 30
3. Using pages 13 and 14 in your book, create note cards for the anterior and posterior body landmarks

30 mins.

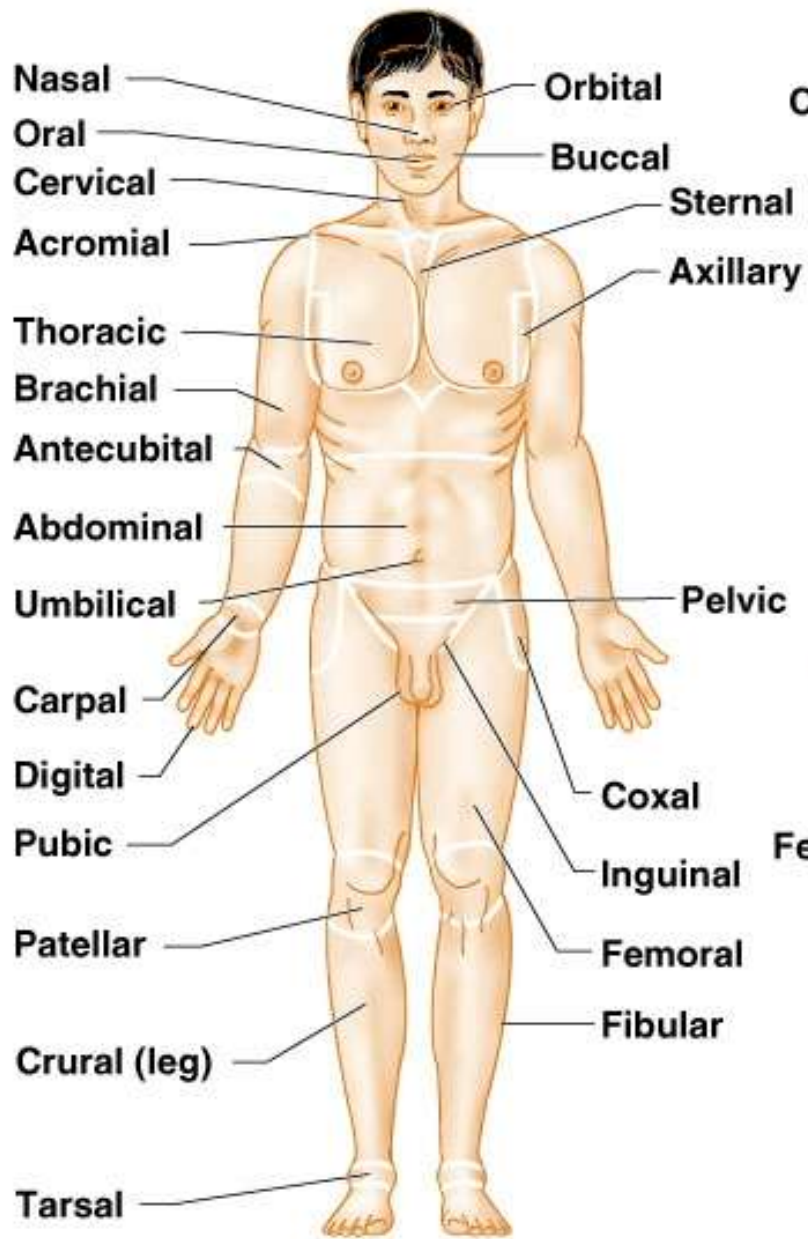
Anterior Body Landmarks

- Abdominal: anterior body trunk
- Antecubital: anterior surface of the elbow
- Axillary: armpit
- Brachial: arm
- Buccal: cheek area
- Carpal: wrist
- Cervical: neck region
- Digital: fingers and toes
- Femoral: thigh
- Inguinal: thigh meets trunk
- Nasal: nose
- Oral: mouth
- Orbital: eye area
- Patellar: anterior knee
- Peroneal: lateral part of the leg
- Pubic: Genital region
- Sternal: Chest
- Tarsal: ankle
- Thoracic: chest
- Umbilical: navel

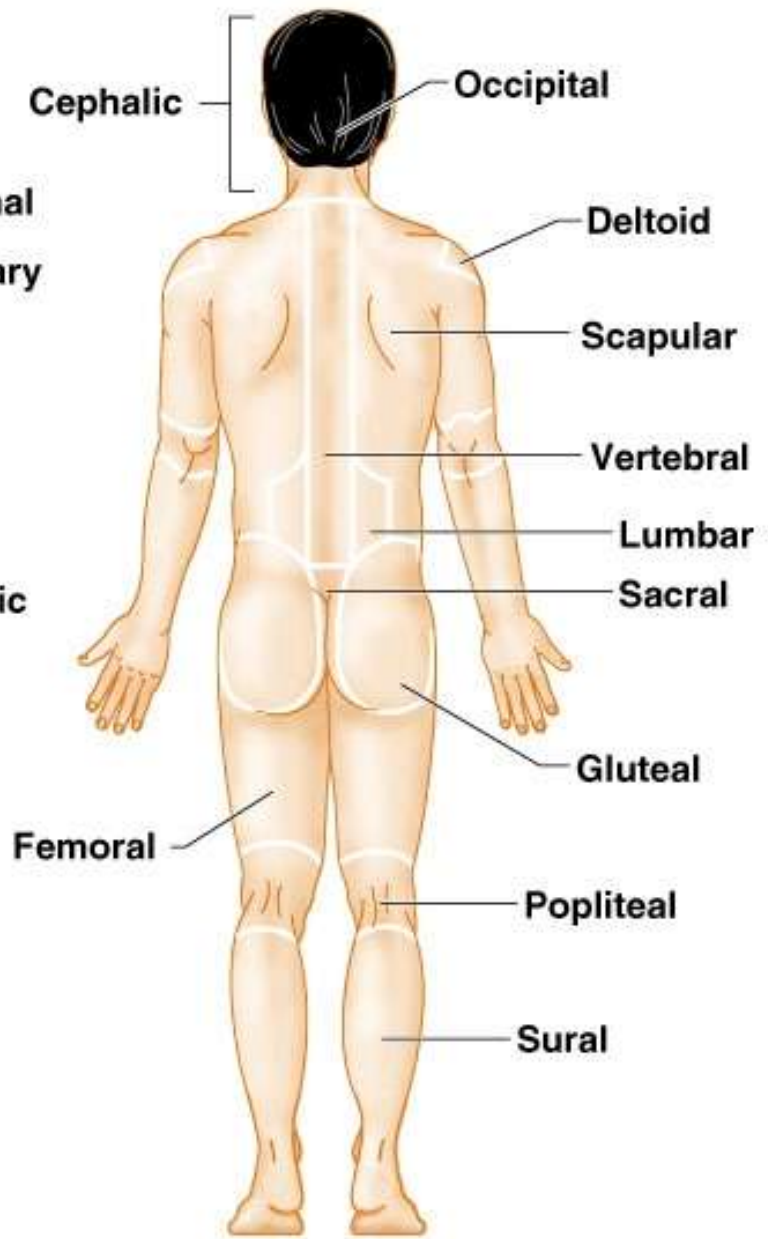
Surface Anatomy

Posterior Body Anatomy

- Cephalic: head
- Deltoid: curve of shoulder
- Gluteal: buttock
- Lumbar: lower back
- Occipital: posterior surface of the head
- Popliteal: posterior side of the knee
- Scapular: shoulder blade
- Sural: posterior lower leg
- Vertebral: spine



(a) Anterior



(b) Posterior

Surface Anatomy and Directional terms

- LT: Today I will...
 - Identify at least 10 surface anatomy terms
 - Quiz on surface anatomy tomorrow
- ET: You have two things to do today.
 1. Complete your surface anatomy note cards
 2. Get a lap top and practice identification using the following web sit or one that you found on your own

Games to try

- <http://www.easynotecards.com/matching/6015>
- <https://www.wisc-online.com/learn/natural-science/life-science/ap15405/anatomical-terminology-body-regions>
- <http://www.wiley.com/college/apcentral/anatomydrill/>
- <http://www.purposegames.com/game/posterior-regional-surface-anatomy-quiz>

Sticky Note Quiz!

- Get a partner
- Using the small sticky note pad, divide them up so that one partner has 14 and the other partner has 15 (29 words)
- Write your surface anatomy terms on the sticky notes
- Your partner is going to put the sticky notes on you (do not place them in pubic and gluteal have your model do it for you)
- When all your sticky notes are in place, get Mrs. Sortore to check your quiz

