Anatomy and Physiology Test 1 (Weds. 10/18) Review Sheet: The Skin and Body Membranes Intro. And Unit 1
Be able to label the skin diagram as well!
This packet should NOT be the only resource that you study from. This should just act as a guide.

1. Name the epidermal layers in order from deepest to superficial. REMEMBER THE ANEMONIC
   DEEP: Stratum Basale, Spinosum, Granulosum, Lucidum
   Superficial: Stratum Corneum

2. What type of vitamin can be produced by the skin? Vitamin D

3. Give another name for the skin. Hint: It is the only dry membrane Cutaneous membrane

4. Why don't we get water logged when we go swimming? The protein keratin in our epidermis creates a water-proof layer on our skin.

5. What layer of the skin does not have a blood supply of its own? Epidermis

6. How is "tanning" somewhat protective? When the skin is exposed to UV radiation it activates Melanocytes to produce more melanin which causes "tanning." The more melanin the more protected the skin gets to a certain point.

7. Where are pain and touch receptors located within the skin? Dermis

8. What is acne? Explain the difference between a whitehead, blackhead, and acne.
   Whitehead: Plugged sebaceous duct
   Blackhead: Oxidized material in plugged duct
   ACNE: Infected sebaceous duct. Chronic infection.

9. When do eccrine glands become active? Where are they generally found? What are the main components of the sweat they produce?
   1. Eccrine glands become active during puberty. 2. Found all over the body. 3.

10. Where are apocrine glands found? What type of sweat do they create?
    Axillary & genital region / Fatty acids, etc. (Bacteria eat, produce waste, causes body odor)

11. Describe and state the cause of Seborrhea, Impetigo, Athlete's foot, Herpes simplex, Decubitus ulcers (bedsores), Psoriasis, (All on next page)
    Seborrhea = "Cradle cap" in infants, overactive sebaceous glands. Yellow, brown, crust that sloughs off.
    Impetigo = Contagious staph infection. Pink, crusty, water-filled lesions commonly around mouth and nose.
12. What produces "goose bumps?" Why is this a helpful adaptation?

- The Arrector pili muscle pulls on the hair root causing it to stand up straight.
- This creates an extra barrier of air which helps to keep you warm.

13. Describe the ways the skin is involved in the thermoregulation of the body.

- Arrector pili pull hair erect to warm the body.
- Sweat is created and evaporates to cool off body.

14. What is the main component of subcutaneous tissue and what purpose does it serve?

\[ \text{Adipose tissue (Fat)} \quad \text{PURPOSE: Insulates body and provides attachment site for other skin layers.} \]


Friction causes a pocket to form between the epidermis and dermis. Fluid then fills in this pocket.

16. Which layer of the dermis would you find dermal papillae?

Papillary layer (the 1st of the 2 layers)

17. Name the factors that determine skin color.

The amount of melanin produced determines skin color.
UV light also activates more melanin production.

18. Which layer of the epidermis produces new epidermal cells?

Stratum basale

19. What are EXOCRINE glands?

Any glands that secrete substances on the surface of the skin.

20. What is the function of SEBUM?

\[ \text{Acts as a lubricant that keeps skin soft and moist and prevents hair from becoming brittle.} \]

* continued from # 11:

Athlete's foot: fungal infection. Causes itchy, red, peeling skin between toes. Also called Tinea pedis.

Herpes Simplex: (cold sores) Caused by Herpes virus. Present as fluid filled blisters that itch and sting. Stress, fever, or UV radiation activates virus. Usually occur around the mouth.

Decubitus Ulcers (Bed sores): Pressure of the body cuts off blood flow → cells die → sore appears.

UNIT 1 INTRODUCTION TO ANATOMY & PHYSIOLOGY

Name that organ system!

1. Rids the body of nitrogen containing wastes. **Urinary**

2. Produces hormones that control body functions. **Endocrine**

3. Provides support and stores minerals. **Skeletal**

4. Includes the heart & blood vessels. **Cardiovascular or Circulatory**

5. Protects the underlying organs from drying out. **Integumentary**

6. Protects the body: destroys bacteria & tumor cells. **Immune**

7. Breaks down food into small particles that can re-absorbed. **Digestive**

8. Removes carbon dioxide from the blood. **Respiratory**

9. Delivers oxygen & nutrients to body tissues. **Circulatory or Cardiovascular**

10. Moves the limbs; allows facial expression. **Muscular**

11. Conserves body water or eliminates excess water. **Urinary**

12. Provides for conception and childbearing. **Reproductive**

13. Includes the thyroid, pancreas, pituitary, and adrenal glands. **Endocrine**

14. Includes the brain and spinal cord. **Nervous**

15. Carries red blood cells. **Circulatory or Cardiovascular**

16. Produces red blood cells. **Skeletal**

17. Includes ovaries, Fallopian tubes, & uterus. **Reproductive**

15. Includes esophagus, large intestine & rectum. **Digestive**

16. Collects leaked fluid and returns it to the blood. **Lymphatic**
Describe the body region or directional word each of these terms refer to:

1. Abdominal - anterior body trunk
2. Acromial - point of shoulder
3. Antebrachial - forearm (lower arm)
4. Brachial - arm (upper)
5. Buccal - cheek
6. Carpal - wrist
7. Cephalic - head
8. Cervical - neck region
9. Digital - fingers or toes
10. Femoral - thigh (femur)
11. Femoral - (crossed out)
12. Dorsal - towards the back
13. Genital - pubic area
14. Gluteal - buttocks
15. Inguinal - groin
16. Lumbar - lower back
17. Nasal - nose area
18. Pectoral -
19. Occipital - back of neck
20. Oral - mouth
21. Otic - ear
22. Pedal - foot
23. Pelvic - area overlying the pelvis anteriorly
24. Sacral - area between hips (sacrum)
25. Sternal - breastbone area
26. Umbilical - navel (belly button)
27. Vertebral - area of spinal column
28. Popliteal - posterior knee area
29. Olecranal - posterior surface of elbow
30. Coxal - hip
31. Patellar - anterior knee
32. Tarsal - ankle region
Review of Anatomical Terminology:
Body Planes, Cavities, and Quadrants

1. Proximal _______  A. Toward the feet
2. Inferior _______  B. Further from the point of origin
3. Distal _______  C. Toward the back
4. Ventral _______  D. Nearer to the point of origin
5. Dorsal _______  E. Toward the front
6. Medial _______  F. Toward the head
7. Superior _______  G. Toward the midline
8. Lateral _______  H. Away from the midline

Fill in the blanks:

9. The nose is _______ to the mouth.
10. The nose is _______ to the eyes.
11. The shoulders are _______ to the wrist.
12. The knee is _______ to the ankle.
13. The sternum is _______ to the heart.
Directional Terms: write in the term under each diagram

Anterior

Posterior

Superior

Inferior

Medial

Lateral

Proximal

Distal

Name: ___________
Date: ___________
Label each area correctly, hint all are cavities accept #5 which is a muscle that separates the two cavities.