

# Today's Agenda: 8/27/14

1. So much in so little!! Pg. 153
2. Students will highlight standard:  
1.3 Analyze basic structure & function of the human body.
3. **TO: Students will be able to identify the anatomical structures of the skin.**
4. Students will answer a notebook reflection.

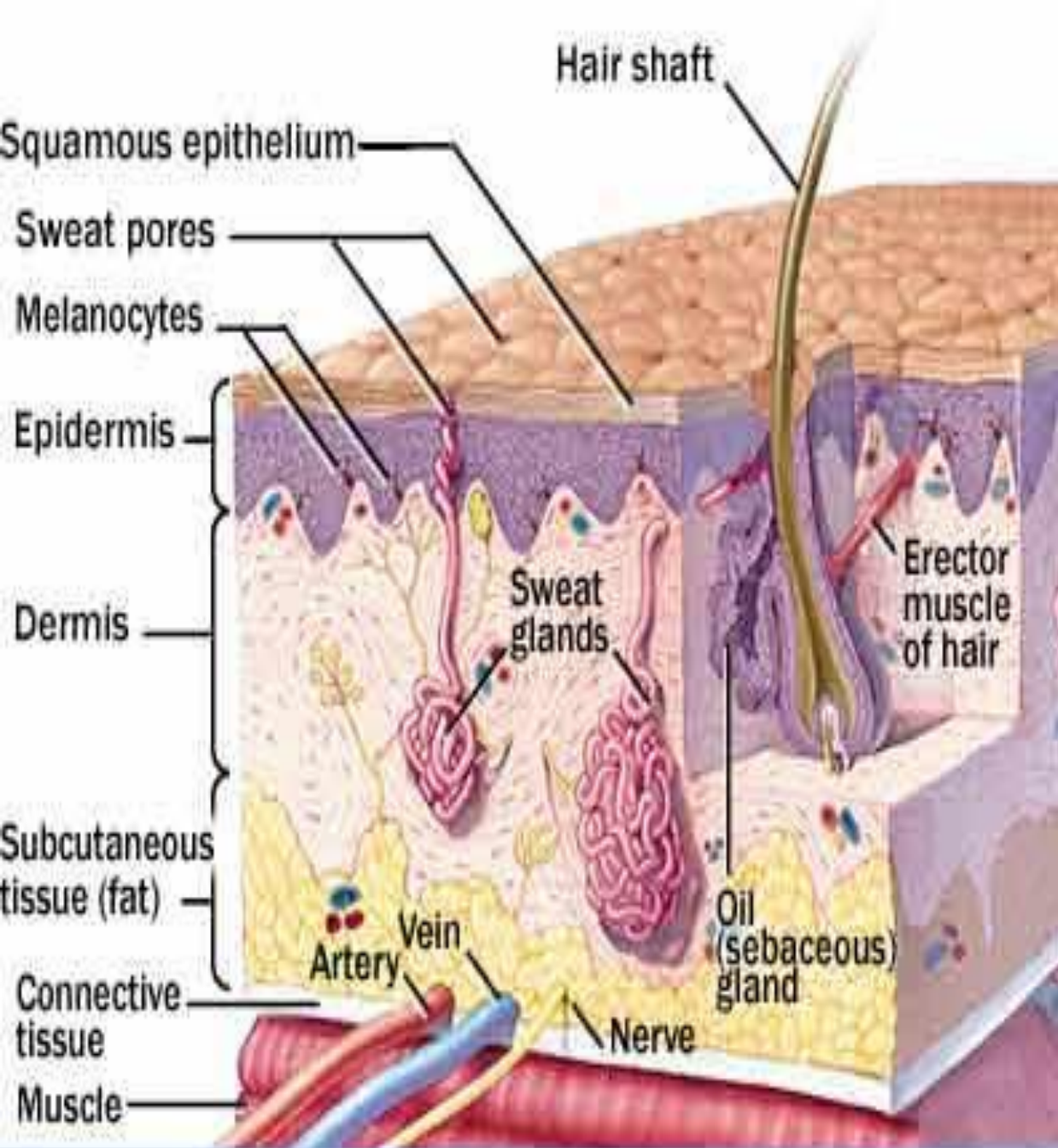




# Integumentary Basic Structure

- **3 main layers of tissue:**
  - **Epidermis (A)**
    - Outermost layer
    - 5 layers; no bld vessels or nerve cells
  - **Dermis (B)**
    - Bld & lymph vessels, nerves, sweat & oil glands, hair follicles, involuntary muscles.
  - **Subcutaneous fascia or Hypodermis (c)**
    - Innermost layer
    - Connects the skin to the underlying muscle





# Glands:

## Sebaceous "Oil glands" (Sebum)

D in coloring picture

## Sudoriferous "Sweat Glands"

E in coloring picture

## Hair:

- Helps protect the body
- Cover the body except ft/palms

**Alopecia** – Baldness, permanent loss of hair on the scalp.



## Nails:

- Protect the fingers & toes.
- Made of dead cells



# 7 Integumentary Functions

1. **Protection** from UV rays/pathogens
2. **Sensory Perception** to pH, Pressure, T, touch
3. **Body Temperature Regulation:**
  - a) Blood vessels dilate or constrict.
  - b) What gland helps to cool the body?
4. **Storage:** Fat, glucose, water, vitamins, & salts
5. **Absorption:** Transdermal medication
6. **Excretion:** Salt, water and heat
7. **Production:** Vitamin D from the UV rays

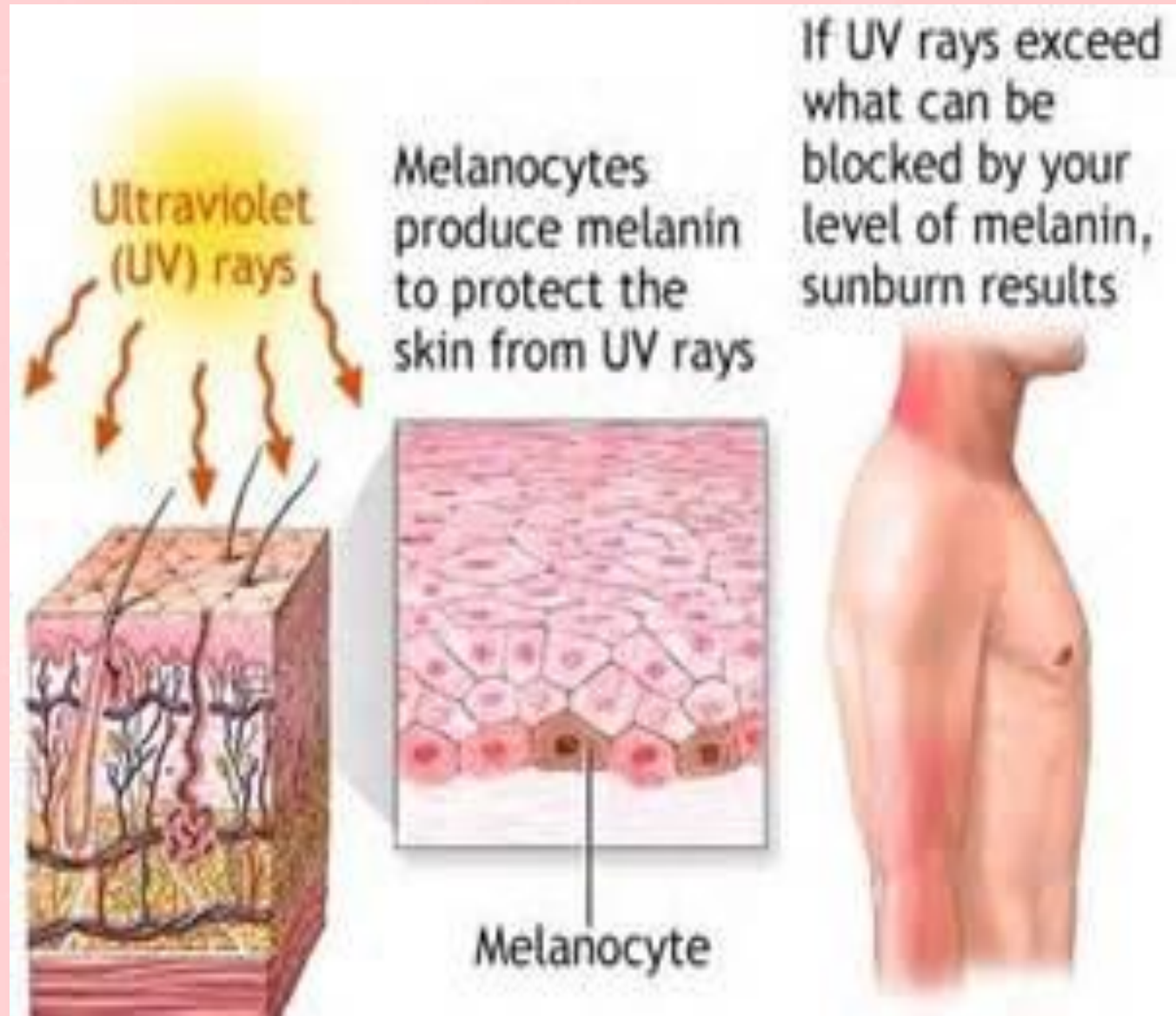


# 6 Pigmentation

1. **Melanin:** A brownish-black pigment, absorbs UV light, freckles.
2. **Carotene:** A yellowish-red pigment
3. **Albino:** Pigments absent; pinkish tint, white hair, red eyes, sensitive to light.
4. **Erythema:** A reddish color of the skin by burns
5. **Jaundice:** A yellow discoloration; bile in the bld.
6. **Cyanosis:** A bluish discoloration; lack of O<sub>2</sub>.



# Melanin







# Erythema



**Caused by Lone Star Tick**



**Erythema (red) annulare (round)  
centrifugum (spreads from center)**

# Jaundice

Due to increase in bilirubin in the bld, frequently seen c/ cancer, liver, and hepatitis pts.



# Skin Eruptions:

## 1. Macules = freckles

- flats spots on the skin

## 2. Papules

- firm raised areas
- seen in pimples, and stages of chicken pox and syphilis

## 3. Vesicles

- blisters or sacs full of fluid; chickenpox

## 4. Pustules = acne or pimples

- sacs filled with pus

## 5. Crusts = scabs

- areas of dried pus and blood

## 6. Wheals = hives or insect bites

- itchy, elevated areas c an irregular shape

## 7. Ulcer

- deep loss of skin surface that may extend into the dermis



A. Burrow.



B. Comedone.



C. Macule.



D. Papilloma.



E. Papule.



F. Petechiae and purpura.



G. Plaque.



H. Pustule.



I. Scale.



J. Telangiectasia.



K. Vesicle.



L. Weal.