**Integumentary System: The Skin**

1. What are the three major layers of the skin? **Epidermis, dermis, hypodermis**
2. What are the functions of the skin? **Protect underlying structures, Insulation, Absorption of UV radiation (~8 min daily with arms and legs exposed), Metabolizes Vit D, Fluid & temperature balance**
3. How many cell layers make up the epidermis? **five**
4. What is the primary function of the epidermis? **protection**
5. How many layers make up the dermis? **two**
6. What are three characteristics of dermis? **Vascular, innervated, dermal appendages**
7. What is characteristic of the hypodermis? **Fat (adipose tissue)**
8. What is found on the epidermis that protects the skin from bacteria? **Low pH (“acid mantle)**
9. What cells on the epidermis are immune processing? **Langerhans cells**- **active in the capture, uptake and processing of antigens… then become antigen-presenting**
10. What causes “tanning?” **sun exposure causes melanocytes to produce extra melanin (pigment) for protection**
11. What are the two primary layers of the dermis? **Papillary- fine and loosely arranged collagen fibers, and Reticular- thick, densely packed collagen fibers**
12. What are rete pegs? **A series of finger-like structures on the dermis that increase the area of contact between the layers of skin, and help to prevent the epidermis from being sheared off.**
13. What are three types of dermal appendages? **Hair follicles, oil and sweat glands**
14. T or F: Dermal appendages are not continuous with the dermis. **False**
15. What is the smooth muscle found at hair follicles called? **Erector pili… tiny muscles attached to your hair follicles that make your hair stand on end**
16. In order for the skin to detect pain, temperature, touch, etc, it must be **innervated**.
17. What cells found in your dermis synthesize collagen? **fibroblasts**
18. What cells found in your dermis carry out phagocytosis? **macrophages**
19. What are three functions of adipose tissue? **Protection, insulation, cushion**
20. T or F: Adipose tissue varies in depth. **True**
21. Instead of first, second, and third degree burns, we now have **superficial**, **partial thickness**, and **full thickness** burns.
22. A partial thickness burn can be either **superficial** or **deep**.
23. In a superficial burn, what is the only layer of skin affected? **Epidermis (ex: sunburn)**
24. T or F: In a superficial burn, there can be blisters. **False**
25. T or F: In a superficial burn, there can be scarring. **False**
26. T or F: In a superficial burn, there can be pain. **True**
27. How many days does it take for a superficial burn to heal? **2-5 days**
28. What is the difference between a partial thickness superficial burn and a partial thickness deep burn? **A p.t. superficial burn is one where the epidermis and just part of the dermis are burned. In a deep superficial burn, the injury is deeper into the dermis.**
29. T or F: In a P.T. superficial burn, there are usually blisters. **True**
30. T or F: In a P.T. superficial burn, there is great pain, but no nerve endings are exposed. **False, great pain because nerve endings are exposed.**
31. T or F: In a P.T. superficial burn, there can be scarring. **False**
32. T or F: In a P.T. superficial burn, there is blanching with slow refill. **False, blanching with quick refill.**
33. In a P.T. superficial burn, there may be swelling or **edema** and the color of the wound bed will be **pink-red**.
34. How long does it take for a P.T. superficial burn to heal? **7-14 days**
35. T or F: In a P.T. deep burn, there is blanching with slow refill. **True because bl flow is impaired.**
36. What color is the wound bed of a P.T. deep burn? **Shades of red, yellow, and brown**
37. T or F: In a P.T. deep burn, there can be blisters. **False**
38. How long does it take for a P.T. deep burn to heal? **4-10 weeks**
39. What leads to the breakdown of the skin in a P.T. deep burn? **Lack of rete pegs**
40. T or F: A P.T. deep burn scar is usually uniform in depth. **False**
41. Which layers of the skin does a full thickness burn affect? **All down to subcutaneous tissue and fat**
42. What color is the wound bed of a full thickness burn? **Black, brown, cherry red, waxy white**
43. T or F: In a full thickness burn, there Is blanching with slow refill. **False, no blanching**
44. T or F: A full thickness burn can be painless. **True**
45. Because of the severity of a full thickness burn, sometimes **skin grafts** are used to cover the wounded area.
46. In a full thickness burn, which body systems are affected? **all**
47. When over **20**% of skin is burned, all body systems are affected.
48. Edema and fluid loss occurring after a severe burn can lead to **hypovolemia**.
49. After a severe burn, what happens to blood cell concentration? **Is altered and function can alter**
50. In a burn victim, HR **increases**, CO **decreases**, and BP **decreases**.
51. Because of edema, **distal** pulses may be hard to measure.
52. What is an assessment measure of burns of the skin? **Total body surface area (TBSA)**
53. In adults, what are two ways of determining the total percentage of area burned for each major section of the body? **1- rule of nines, 2- estimate palm size as 1% of TBSA and compare it to burn size to estimate total percentage of area burned**
54. For children and infants, what is used to assess the burned body surface area? **Lund and Browder, allows for the varying proportion of body surface in those of different ages.**