Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_ Mods: \_\_\_\_\_

Integumentary System Review – pt. 2

1. There are two distinct layers of skin ( skin is AKA the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_membrane)
   1. Epithelial tissue makes up the more superficial layer called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. The connective tissue layers are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is immediately deep to the epidermis, and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is generally continuous with the dermis and is technically not a part of the skin, but a tissue layer that is deep to it.
2. What does *subcutaneous* mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The subcutaneous layer of tissue is AKA the “\_\_\_\_\_\_\_\_\_\_\_dermis”
4. Though not part of the skin, the subcutaneous layer binds the skin to underlying organs. What are the other functions of this layer (HINT – what’s in it, what do these *things* do?)?

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1. Why do calluses form?

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1. Describe the *structural cause* of the variation of skin pigmentation in humans (IOW: what do people with darker skin have more of?)

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1. Other than genetics or UV radiation, name one other factor that can impact skin color:

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1. Why is it that no two fetuses, even identical twins, have identical fingerprints? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. List where hair is not found on a human: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Complete the following table to compare the three layers *associated* with skin (only two are actually considered to be skin!). More than one answer may apply to a statement.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Epidermis** | **Dermis** | **Hypodermis** |
| 1. AKA “subcutaneous layer” |  |  |  |
| 1. AKA “cutaneous membrane” |  |  |  |
| 1. Most superficial |  |  |  |
| 1. Contains any blood vessels |  |  |  |
| 1. Avascular |  |  |  |
| 1. Stratified squamous epithelium |  |  |  |
| 1. Source of skin color |  |  |  |
| 1. Generally thinnest of the two layers of the cutaneous membrane |  |  |  |
| 1. Generally thickest layer of the cutaneous membrane |  |  |  |
| 1. Contains machinery to produce facial expressions |  |  |  |
| 1. Technically, not skin but below (*sub*) it. |  |  |  |
| 1. Composed mainly of adipose tissue |  |  |  |
| 1. Where the glands originate |  |  |  |
| 1. Where the hair follicle originates |  |  |  |
| 1. The most superficial layer |  |  |  |
| 1. Consists of a layer of keratinized cells |  |  |  |
| 1. Though typically the thinnest layer, it is thickest on palms and soles |  |  |  |
| 1. Houses smooth muscle tissue |  |  |  |
| 1. Houses nerve cell processes/endings so that you can sense the world by touch |  |  |  |
| 1. Protects against water loss to the environment |  |  |  |
| 1. Includes a layer of melanocytes |  |  |  |
| 1. Layer you lose in the shower when skin ‘flakes’ off |  |  |  |
| 1. Houses the major blood vessels that supply smaller vessels to the dermis |  |  |  |
| 1. Swells and wrinkles when you spend too much time soaking in the bath |  |  |  |
| 1. Damaged with a first degree burn (like a minor sunburn) |  |  |  |
| 1. Tissue layer that has one edge exposed and a basement membrane on the other |  |  |  |