

READING NOTES CHAPTER 6: INTEGUMENTARY SYSTEM (SKIN)

Name _____
Period ____ Due date _____

Introduction (p. 180)

Two or more types of tissues grouped together working together for a function are called an _____. Since the skin is composed of several types of tissues, it definitely qualifies as one. It is vital in maintaining _____. It isn't enough to just say our skin **protects us**, for it does so in many ways:

- 1) It prevents many substances, including microorganisms, from _____.
- 2) It retards _____ loss.
- 3) It regulates body _____.
- 4) It houses _____ receptors.
- 5) It contains _____ cells for initiating immune response.
- 6) It _____ small quantities of waste.
- 7) It produces small quantities of vitamin _____.

Skin and its tissues

There are many layers to the skin system. Each layer is specialized for different functions. **Be sure to read the blue inset boxes (ways to transmit medicines through the skin, bed sores, and psoriasis) on pages 181-183!**

Epidermis – for each layer found within, **list its primary function (what are the keratinocytes doing in each layer) and other specialized cells found there.**

Stratum basale (germanitivum)

Melanocytes

Merkel cells

Stratum spinosum

Langerhans (dendritic) cells (p. 180 introduction)

Desmosomes

Stratum granulosum

Stratum lucidum

Stratum corneum

The epidermis ties to the underlying layer of the dermis by a **basement membrane**. Separations between these layers results in a **blister** forming, which is interstitial fluid that rushes in to stabilize the separation and promote healing.

Dermis (page 185) – There is an uneven ridgeline called dermal _____ to increase the surface area for epidermal cells to receive oxygen and nutrients. These ridges are most abundant in our fingertips and toes, leaving a patterned impression called a _____. The dermis consists of two layers. For each layer, **list types of fibers** and the **function of each of the specialized cells found within:**

Papillary layer:

Fibers:

Meissner's (tactile) Corpuscles

Reticular layer:

Fibers:

Pacinian (lamellated) Corpuscles

Ruffini Corspuscles

Skin coloration (pages 184 -185) – is determined by heredity but is a function of hemoglobin, carotene, and melanin amounts. For each of the disorders, **list the cause:**

Albinism:

Tan skin:

Pink/red skin:

Cyanosis:

Paled skin:

Jaundice (see inset box on p. 185):

Skin cancer (inset box on p. 184):

Indicators of skin cancer

A:

B:

C:

D:

E:

Types of glands in skin (pages 188 – 190) – for each gland, list what the primary function is along with its location/layer.

Sebaceous:

Eccrine (sweat):

Apocrine:

Ceruminous:

Mammary:

Burn classification (pages 192 – 194) – for each degree of burn, describe the level of tissues affected as well as level of severity for treatment.

First-degree (superficial partial-thickness):

Second-degree (deep partial-thickness):

Third-degree (full-thickness):