

## Chapter 5

- 1) The skin and its accessory structures make up the \_\_\_\_\_ system.
- 2) The integumentary system functions to guard the body's physical and biochemical integrity, maintain a constant \_\_\_\_\_, and provide \_\_\_\_\_ information about the surrounding environment.
- 3) The skin is the \_\_\_\_\_ organ of the body.
- 4) Structurally the skin consists of two parts
  1. The superficial portion of the skin is the \_\_\_\_\_ and is composed of epithelial tissue.
  2. The deeper layer of the skin is the \_\_\_\_\_ and is primarily composed of connective tissue.
  3. Deep to the dermis is the *subcutaneous layer* or \_\_\_\_\_.
    - a. It is *not* a part of the skin, and it *serves* as a \_\_\_\_\_ area, an area for blood vessel passage, and an area of pressure nerve endings.
- 5) The epidermis is composed of \_\_\_\_\_ and contains four principal types of cells: *keratinocytes*, *melanocytes*, *Langerhans cells*, and *Merkel cells*.
- 6) \_\_\_\_\_ produce the protein keratin, which helps protect the skin and underlying tissue from heat, microbes, and chemicals, and lamellar granules, which release a waterproof sealant.
- 7) \_\_\_\_\_ produce the pigment melanin which contributes to skin color and absorbs damaging ultraviolet (UV) light.
- 8) \_\_\_\_\_ cells participate in immune responses.
- 9) \_\_\_\_\_ cells contact a sensory structure called a tactile disc and function in the sensation of touch.
- 10) There are four or five layers of the epidermis, depending upon the degree of friction and mechanical pressure applied to the skin. From deepest to most superficial the layers of the epidermis are stratum \_\_\_\_\_, stratum \_\_\_\_\_, stratum \_\_\_\_\_, stratum \_\_\_\_\_ (only in palms and soles), and stratum \_\_\_\_\_.

Integumentary
body temperature
sensory
largest
epidermis
dermis
hypodermis
fat storage
stratified squamous
epithelium
Keratinocytes
Melanocytes
Langerhans
Merkel
basale
spinosum
granulosum
lucidum
corneum