I. Overview ⇒ KNOW Fig 5.1 (Should be labeled “Structure of Integumentary system”)
- sketch

A. A true system, not synonymous with “skin”

B. Skin = dermis + epidermis = cutaneous membrane
   “skin” “skin”
   -
   -

C. Subcutaneous tissue or hypodermis is not considered skin by anatomists

D. Functions
   ✦
   ✦
   ✦
   ✦
   ✦
   ✦
II. Epidermis → KNOW Fig. 5.3
A. stratified squamous epithelium
   -
   -

B. folded into friction ridges (= fingerprints)
   -
   -

C. two main cell types (NRF others)
   1. keratinocytes ~ 90%, produce keratin
      "horny"
   2. melanocytes ~ 8%
      "black"
   -- produce melanin

   -- How many of you are paying to get skin cancer?

D. Skin types (remember Rule #2?) → note in lab, cf. Fig. 5.3, 5.4, 5.5
   • “thick” skin
   • “thin” skin
   •
   • Complete chart for details (see text p. 109 for reference):

<table>
<thead>
<tr>
<th>Feature</th>
<th>Thin skin</th>
<th>Thick skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layers (how many?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location on body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sebaceous glands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweat glands: relative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>abundance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Dermis
   A. deeper, vascular layer of c.t.
      1. papillary region
         “little nipple”
      2. reticular region –
         “net”
      3. abundant nerve endings, glands, blood vessels, hairs

IV. Subcutaneous tissue (hypodermis)
   - not part of skin
   - superficial fascia to anatomists

V. Accessory organs
   A. hair (= pilus) → Fig. 5.6 & Chapter intro Fig. (p. 108)
   B. nails
   C. Cutaneous glands → Fig. 5.3, Know Table 5.3
      1. sudoriferous glands: see text for details & complete chart
         “sweat”

<table>
<thead>
<tr>
<th>Feature</th>
<th>Merocrine sweat gland</th>
<th>Apocrine sweat gland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body-wide Distribution &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>relative number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure: lumen size &amp;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>location of duct</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. modified sweat glands
   a. ceruminous glands –  “wax”
   b.

3. sebaceous (oil) glands
   - secrete sebum
   -
   -

VI. Blood supply
   A. epidermis avascular
   B. dermis has 2 capillary networks
      1.
      2.

VII. Color
   A. produced by 3 major pigments
      1. melanin
      2. hemoglobin
      3. carotene
   B. significant diagnostic value  see text p. 115
      1. cyanosis
      2. erythema
      3. pallor
      4. albinism
      5. jaundice
      6. hematoma