**Skin Notes**

Skin Functions

1. Protection from
   1. Physical “wear and tear”. Skin cells contain tough keratin protein.
   2. Chemicals
   3. Infection from bacteria, viruses, and fungi
   4. UV light: our skin produces a pigment called melanin that absorbs UV light
   5. Drying out: our layers of dry, dead skin protect our moist tissues underneath from drying out.
2. Heat regulation
   1. Our sweat glands produce sweat to keep us cool.
3. Sensation
   1. We have receptors in our skin for touch, temperature, and pain.
4. Vitamin D
   1. Our skin can produce Vitamin D when exposed to sunlight. (Note: only a small amount of exposure is needed and we get Vitamin D through our diet.)

Skin Disorders

1. Acne
   1. Clogged sebaceous (oil) glands
2. Infections
   1. Bacterial infections, Fungal infections (athlete’s foot, ring worm), Viral infections (cold sores, chicken pox/shingles)
3. Allergic reactions
   1. Called contact dermatitis (e.g. the rash from poison ivy)
4. Burns
   1. 1st degree burn = epidermis only (skin is red and swollen)
   2. 2nd degree burn = epidermis and upper dermis (skin is red and blistering)
   3. 3rd degree burn = epidermis and entire dermis down to the hypodermis (burn is gray/white or black)
5. Skin Cancer
   1. Skin cancer is the most common type of cancer.
   2. Different types basal cell carcinoma, squamous cell carcinoma, malignant melanoma
   3. Malignant melanoma is the most deadly. It results from cancerous pigment cells.
      1. The A, B, C, Ds of suspicious moles = asymmetry, border irregularity, color (i.e. multiple colors), and diameter (i.e. larger than 6mm, the size of a pencil eraser).