Grade 5 Sample Lesson Plan:  
Unit 1 Body Systems – Skin Feels

SOLs
- 5.1.A Identify the major structures and functions of the integumentary (skin, hair, and nails) system.
- 5.1.J Recognize the importance of good hygiene habits.
- 5.3.A Identify strategies that you will employ to protect against the harmful effects of the sun.

Objectives/Goals
- Students will identify the structures and functions of the human skin.
- Students will recognize and describe good hygiene practices for their skin.
- Students will demonstrate and describe the importance of the nerve structure/sense of touch as it pertains to the skin.

Materials
- 2 small brown paper bags per group of 4 students
- Several small items to be placed in the bags (suggestions: paper clip, key, individually wrapped candy, sticky note)
- Mitten or glove per group of 4 students
- Handouts Skin Feels and What’s in the Bag?
- PowerPoint presentation Skin Feels

Procedure

Step 1
- Introduce the unit on human skin by having the students view the KidsHealth Movie: Skin (6:26 in length).

Step 2
- Have students complete the notes pages Skin Feels by utilizing the PowerPoint presentation slides.
- Slide 1: Introductory video is linked to this slide and this answers #1 on the student’s handout – the biggest human organ is the SKIN.
- Slide 2: Discuss the layers of the skin and the general purpose of each layer. EPIDERMIS – is the outer most layer that you can touch. It is a barrier or protector to
keep things from getting into or out of the body. This layer also is the reason people have different skin tones. **DERMIS** – the next layer that contains the hair follicle and sweat glands. **HYPODERMIS** – the fat and connective tissue provide insulation and padding. **MUSCLE** – provides movement, however, is not considered an actual layer of the skin.

- **Slide 3:** Answer questions #3 (MELANIN), #4 (EPIDERMIS), AND #5 (a. 10-2, b. 2) of the handout. Express to students that melanin is a pigment made by cells. It is also found in our eyes and hair. The reason people should stay indoors between 10 AM and 2 PM is because that is when the sun is at its peak or its burning rays are at its strongest. Generally speaking, people should reapply sunscreen every 2 hours, however it may need to be more often if they are swimming and drying off or sweating.

- **Slide 4:** Have students answer questions about the structures of the skin before reviewing the information. **Sweat pore** – is a pathway for sweat to leave the body. **Nerve** – sends signals to our brain that we are touching something or it’s cold outside. **Sebaceous (oil) gland** – lubricates the skin so it doesn’t dry and crack open, however too much oil production during puberty may cause the pores to become blocked and lead to pimples. **Sweat glands** – control body temperature through sweating or tightening of the skin (goose bumps/pimples). **Hair follicle** – is the opening the hair grows out of; hair provides warmth.

- **Slide 5:** Students can complete a 1-minute turn and talk about ways to care for the skin (#7). Provide the students with correct answers: wash with soap daily, don’t touch your face, don’t pick/pop pimples, change your pillow case.

**Step 3**

- Group students for the *What's in the Bag?* activity (4 students per group) and give each group with the provided *What's in the Bag?* handout.
- Each group will need two brown bags labeled #1 and #2. In bag #1 place 4 small items and in bag #2 place 4 different items.
- Explain that each student will take a turn reaching into the bag #1 and making an educated guess as to what item they are touching. They are permitted to explain what they feel to their group members; however, they cannot remove the item from the bag or look into it at any time. They should write their guess down on the handout and pass the bag to the next group member. He/she must find a different item in the bag and continue the process until all four items have been identified.
- Once they have completed the activity for bag #1, have them complete the same activity with bag #2 wearing a mitten/glove on their hand.
- Depending on time, a timer set for 5 minutes for each bag may help move the process along.

**Assessment Idea**

Students can write a journal entry or complete an exit ticket about the frustrations of using the mittens/gloves during the *What's in the Bag?* activity and linking it to the importance of taking care of their skin.

**References**

- Adams, Stacy (2019), Health and Physical Educator; Shaler Area School District, Glenshaw, PA

Handout
The next page includes handouts for the lesson. The handouts are designed for print use only.
1. What is the biggest human organ? ____________________________

2. List the four layers of the human skin:
   a. ____________________________
      • Outermost layer
      • Barrier/protection
      • Skin tone/color
   b. ____________________________
      • Hair follicle
      • Sweat gland
   c. ____________________________
      • Fat
      • Connective tissue
   d. ____________________________
      • Movement

3. What makes skin different tones/colors? ____________________________

4. Which layer could get sunburn? ____________________________

5. What are some helpful hints to protect your skin from the sun?
   a. Stay indoors between the hours of _____ AM and _____ PM
   b. Use sunscreen that has UV protection and reapply about every _____ hours.

6. What is the purpose of the structures of the skin?
7. What are some ways to care for your skin? Good hygiene practices include:

a. ______________________________________________________

b. ______________________________________________________

c. ______________________________________________________

d. ______________________________________________________

- Sweat Pore: _____________________________________________
- Nerve: _________________________________________________
- Sebaceous (oil) Gland: ___________________________________
- Sweat Gland: ___________________________________________
- Hair Folicle: ___________________________________________
WHAT’S IN THE BAG?

DIRECTIONS: In your small group reach into the bag and describe what you feel. Once you determine the object write it on the lines below. Repeat this activity for bag #2 with a mitten/glove on your hand.

BAG #1

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________

BAG #2

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________