



# Human Body Systems

## Virtual Learning

# 9-12th PLTW<sup>®</sup> HBS

PLTW<sup>®</sup> 5.1.1 Under Your Skin

**Part 2: All About Skin: Color, Aging and More**

May 5, 2020



# Human Body Systems

9-12th PLTW<sup>®</sup> HBS  
Lesson: May 5, 2020

## Objective/Learning Target:

Students will be able to describe how human skin deals with stress and how the organ changes as a person ages. (*Reference: PLTW<sup>®</sup> 5.1.1 Under Your Skin*)



# Let's Get Started/Warm Up Activities:

Before we start our lesson today:

- Watch: [How Do Our Bodies Age?](#)
- Read: [Effects of Aging on Skin](#)



# Lesson/Activity:

Watch this video: [How Does the Skin Age?](#)

**Activity #1:** On a piece of paper or in your notebook, describe how the following contribute to the skin aging process:

- A. Reduction in stem cells
- B. Skin becomes thinner
- C. Fiber deterioration
- D. Facial expressions
- E. Less immune cells
- F. Overexposure to the sun



# Lesson/Activity continued:

Watch this Video: [The Biology of Skin Color](#)

**Activity #2:**

Write a 3-5-sentence summary about the biology of skin color and why people have different skin colors.

Watch this Video: [Healthline: Skin Elasticity: 13 Ways to Improve It](#)

**Activity #3:**

Describe how the following supplements and/or treatments may improve skin elasticity:

- A. Collagen
- B. Retinol and retinoids
- C. Hyaluronic acid
- D. Laser treatments
- E. Dermabrasion



# Lesson/Activity Answer(s):

## Activity #1 Answer(s):

Click [HERE](#) to view answers.

## Activity #2 Answer(s):

Click [HERE](#) to view answers.

## Activity #3 Answer(s):

Click [HERE](#) to view answers.



# Practice:

Practice: On your piece of paper or in your notebook, complete a career journal on a **dermatologist**. Use internet websites to research.

- A. Name of Career:
- B. Education Required:
- C. Responsibilities/Daily Activities (at least 3):
- D. Salary in the KC Region:
- E. Self-Reflection: Are you possible interested in pursuing this career? Why or why not?



# Practice Answer(s):

Practice:

Question(s): Complete a career journal on a dermatologist.

Answer(s): Click [HERE](#).





# Additional Practice and/or Resources:

Learn More:

## [HBS Unit 5.1.1 Flashcards](#)

Test your knowledge by clicking on the link above.

## [How to Become a Dermatologist](#)

Dermatology is a great specialty in medicine but it's also a long road that takes a lot of hard work and dedication. Find out more!

## [Do You Have Skin Cancer?](#)

Are they freckles, sun spots, moles, or cancer? Skin cancer is any kind of tumor that originates in the skin, and there are many different types. But if caught and diagnosed early, doctors say skin cancer is more curable. Check out this video to learn more.