



# Human Body Systems

## Virtual Learning

# 9-12th PLTW<sup>®</sup> HBS

PLTW<sup>®</sup> 5.3.3 Fighting the Common Cold  
**Part I of 3: Non-Specific Immune Defenses**

May 20, 2020



# Human Body Systems

9-12th PLTW<sup>®</sup> HBS  
Lesson: May 20, 2020

## Objective/Learning Target:

In Part 1 of 3 of this immune system lesson, students will be able to describe non-specific defenses of the body designed to prevent infections by viruses that cause the common cold. (*Reference: PLTW<sup>®</sup> 5.3.3 Fighting the Common Cold*)



# Let's Get Started/Warm Up Activities:

Before we start our lesson today, complete the following:

- Read the following: [What is Innate Immunity?](#)
- Watch this video: [The Immune System: Innate Defenses and Adaptive Defenses\\*](#)

*\*Watch only to 0-5:46 min of the video (Part 1)*

# Lesson/Activity:

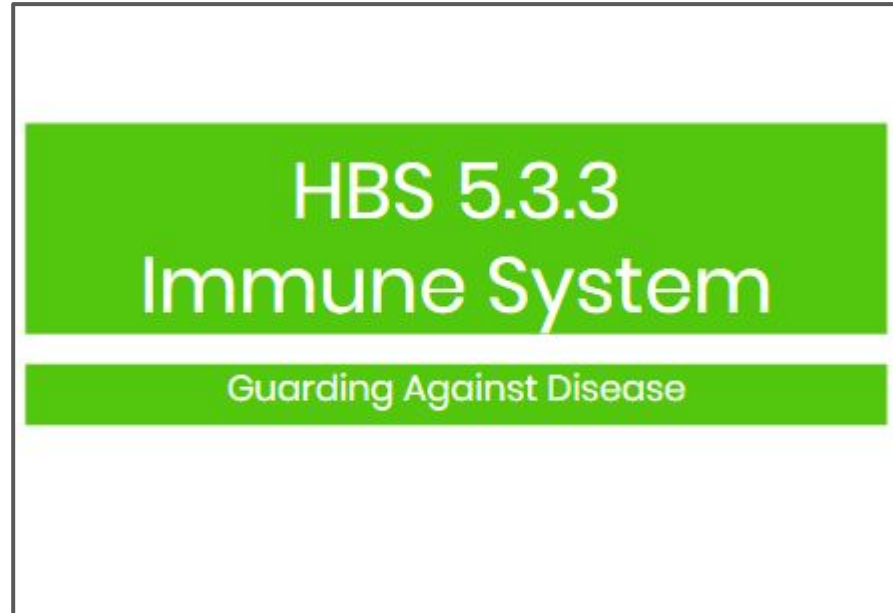
**Read over the following:**

## 5.3.3 Immune System Notes

**Activity #1:** On a piece of paper or in your notebook, write down notes over Slides #2-5 about viruses vs. bacteria.

**Activity #2:** Write notes over Slides #6-15 about the body's first line of defense (also known as non-specific immune defenses).

**Activity #3:** Write notes over Slides #19-21 concerning the introduction to specific defenses. We will continue on Slide #22 about specific defenses in the next lesson.





# Lesson/Activity Answer(s):

## Activity #1 Answer(s):

Click [HERE](#) to view answers, Slides #2-5.

## Activity #2 Answer(s):

Click [HERE](#) to view answers, Slides #6-15.

## Activity #3 Answer(s):

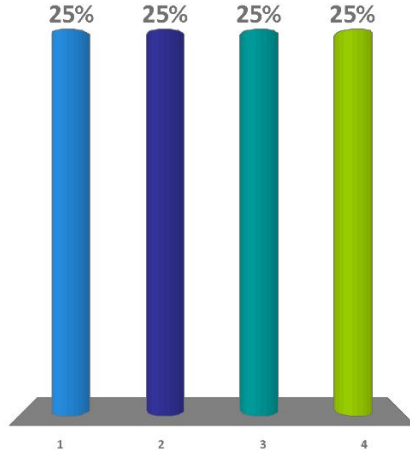
Click [HERE](#) to view answers. Slides #19-21.

# Practice:

Practice: On your paper or in your notebook, answer the following questions.

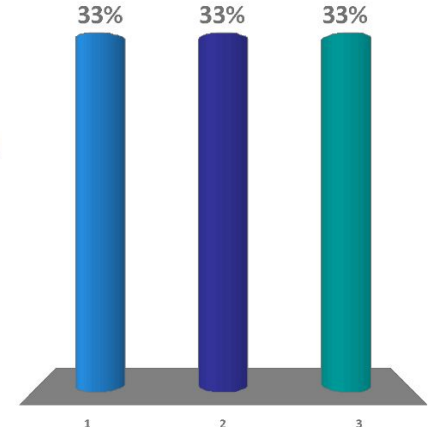
## Fever is caused by:

1. Toxins on the surface of viruses.
2. Release of histamines by damaged cells.
3. Your own body's accumulated toxins.
4. Your body's pyrogens signaling the hypothalamus.



## Based on what you know about non-specific defenses, what's the best way to treat a cut in your skin?

1. Leave it exposed to open air.
2. Wash it, and cover it with a clean bandage.
3. Rub it with dirt.





# Practice Answer(s):

## Practice Answer(s):

Fever is caused by: #4

Best way to treat a cut on your skin: #2



# Additional Practice and/or Resources:

Learn More:

## [HBS Lesson 5.3.3 Flashcards](#)

Test your knowledge by clicking on the link above.

## [Khan Academy: Immune System Reveiw Article](#)

The human body has a series of nonspecific defenses that make up the innate immune system. Read "Nonspecific Defense: The Innate Immune System" section to learn more.

## [Human Physiology - Innate Immune System Video](#)

Learn more about the innate immunity: nonspecific defense mechanisms that come into play immediately or within hours of an antigen's appearance in the body.