



Human Body Systems

Virtual Learning

9-12th PLTW[®] HBS

PLTW[®] 5.3.3 Fighting the Common Cold
Part 2 of 3: Specific Immune Defenses

May 21, 2020



Human Body Systems

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Lesson: May 21, 2020

Objective/Learning Target:

In Part 2 of 3 of this immune system lesson, students will be able to describe specific defenses of the body designed to prevent infections by viruses that cause the common cold. (*Reference: PLTW[®] 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: [Mayo Clinic: Common Cold Causes, Symptoms & Treatments](#)
- Watch this video: [The Immune System: Innate Defenses and Adaptive Defenses*](#)

**Watch only 5:47-13:43 min of the video (Part 2)*

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 #22-23 about antibodies.

Activity #2: Write notes over Slides #24-25 about general antigen function.

Activity #3: Write notes over Slides #26-32 about T-cells and B-cells (adaptive immune response).

HBS 5.3.3 Immune System

Guarding Against Disease



Lesson/Activity Answer(s):

Activity #1 Answer(s):

Click [HERE](#) to view answers, Slides #22-23.

Activity #2 Answer(s):

Click [HERE](#) to view answers, Slides #24-25.

Activity #3 Answer(s):

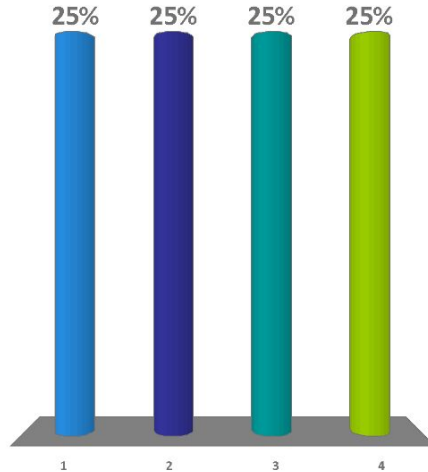
Click [HERE](#) to view answers. Slides #26-32.

Practice:

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

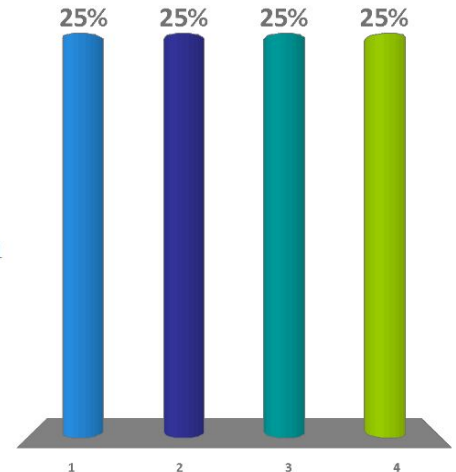
A foreign protein that enters the body is an:

1. antibiotic.
2. antigen.
3. antibody.
4. anti-inflammatory.



The specific immune response is triggered when:

1. A macrophage delivers an antigen to a T-helper cell.
2. Plasma cells begin making antibodies.
3. Pyrogen stimulates a fever.
4. Clonal selection of B-cells occurs.





Practice Answer(s):

Practice Answer(s):

Foreign protein that enters the body: #2

Specific immune response is triggered when: #1



Additional Practice and/or Resources:

Learn More:

[HBS Lesson 5.3.3 Flashcards](#)

Test your knowledge by clicking on the link above.

[Discovery News: Do We Actually Get More Sick in the Winter?](#)

Cold and flu season are in full swing in the winter months. But why when the weather turns cold do we all seem to get sick? Check out this video to learn more.

[The Surprising Reason You Feel Awful When You're Sick](#)

What actually makes you feel sick? Discover how your immune system and proteins called cytokines respond to infections.