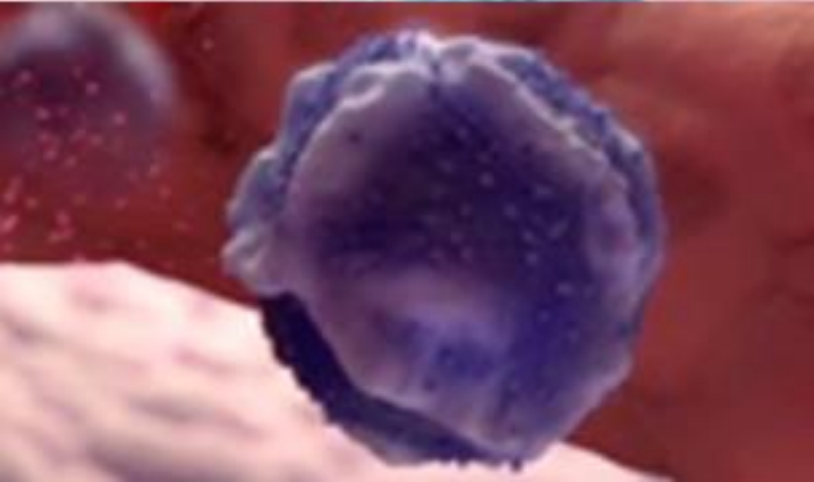
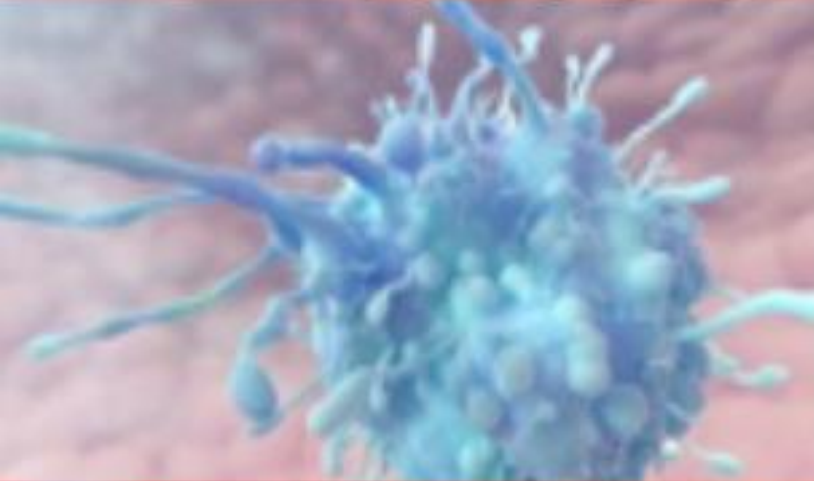
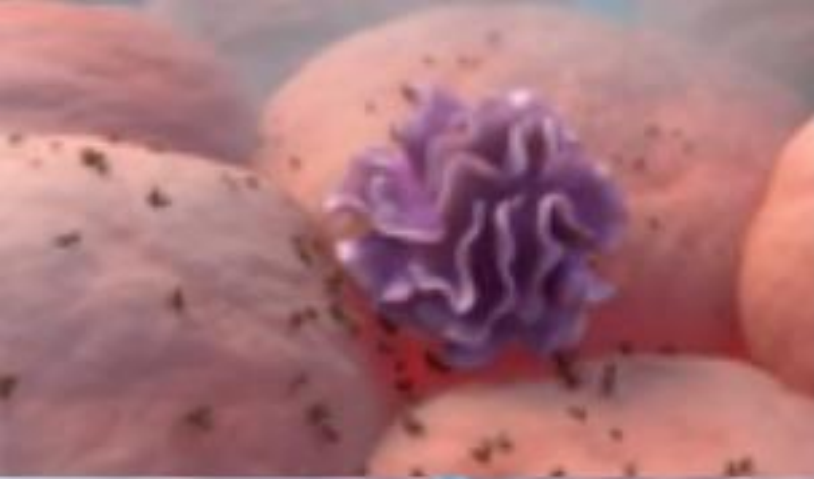


Prep Steps

Unit 1: Lesson 2

The Innate Immune System



Lesson Questions

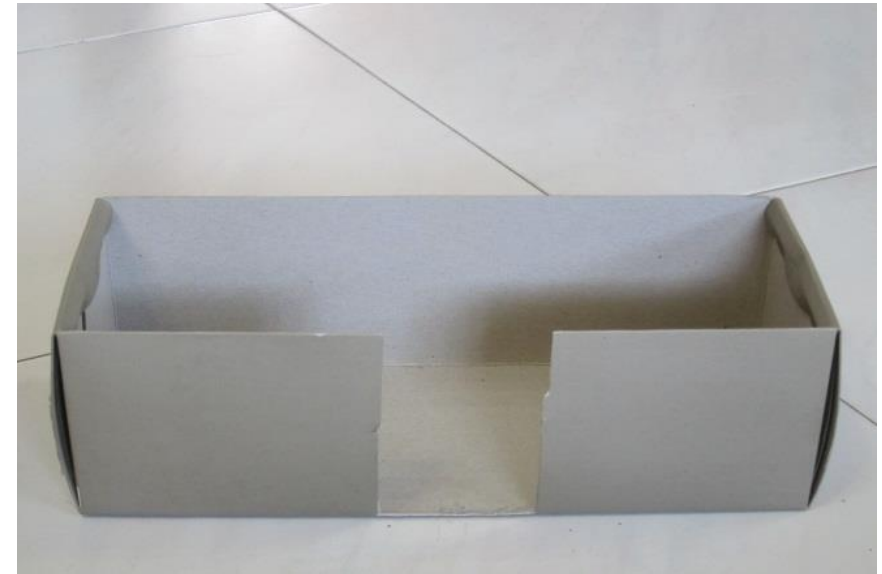
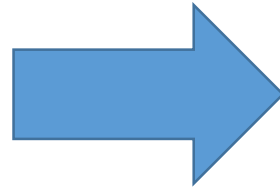
- What are the key features and processes of the innate immune system?
- How can the innate immune system be modeled?

Lesson Objectives

- Define glossary terms related to the innate immune system.
- Identify features of the innate immune system that respond to antigens.
- Analyze the castle and moat model as an analogy for the innate immune system.

Unique Lesson Feature

- Conduct a castle-and-moat activity to model the immune system



Lesson FAQs

- What's in the lesson?
 - Students learn about the body's first line of defense—the innate immune system.
 - Students explore glossary terms associated with the innate immune system.
 - Students conduct a hands-on activity to model the innate immune system.
 - Students calculate statistics from the hands-on activity.
- What interactives are there?
 - Students watch an animation: *The Innate Immune System*.
 - Students complete an interactive table to show how the innate immune system responds to immune system challenges.

Lesson FAQs (cont.)

- What other activities are there?
 - Students discuss how the hands-on activity represents the immune system's interaction with pathogens.
 - Students create a multimedia resource that demonstrates understanding of the innate immune system.
 - As an optional activity, students complete a table to describe symptoms that indicate the innate immune system is functioning.
- How long is the lesson?
 - Three 45-minute sessions

Lesson FAQs (cont.)

- What are the lesson pre-requisites?
 - Students should have:
 - Passed high school biology and chemistry
 - Taken Lesson 1: Organs and Tissues of the Immune System
- Who is the lesson designed for?
 - College prep students
 - Honors students
 - Advanced placement students
 - GED students (lesson may need adapting)

Lesson Content and Timing

- Create list of defense games
- Write a passage about castles

Engage

(10 mins)

- Explore interactive glossary
- Watch animation
- Conduct activity

Explore

(35 mins)

- Answer worksheet questions
- Hypothesize explanations
- Explain model as an analogy

Explain

(30 mins)

- Expand activity
- Analyze activity statistics
- Complete interactive table

Elaborate

(25 mins)

- Create multimedia resource

Evaluate

(35 mins)