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

Engage (10 mins)
- Create list of defense games
- Write a passage about castles

Explore (35 mins)
- Explore interactive
  - glossary
- Watch animation
- Conduct activity

Explain (30 mins)
- Answer worksheet questions
- Hypothesize explanations
- Explain model as an analogy

Elaborate (25 mins)
- Expand activity
- Analyze activity statistics
- Complete interactive table

Evaluate (35 mins)
- Create multimedia resource