

The First Line of Defence

Use with textbook page 48.

1. Give the function of the immune system.

2. In the diagram, identify three parts of the body that are part of the immune system's first line of defence. For each part of the body, provide a description, describe its structure, and give its function in the space provided.

1. _____

2. _____

First Line of Defence

a) Description:

b) Structure:

c) Function:

a) Description:

b) Structure:

c) Function:

3. _____

a) Description:

b) Structure:

c) Function:

The Body's Lines of Defence

Use with textbook pages 48-49.

In each of the following scenarios, indicate which of the human body's lines of defence (first, second, or third) would be responsible for defending it against pathogens.

1. A student touches a doorknob that has some viruses on it. Which line of defence will try to protect the student from the viruses on her hand?

2. A boy breathes in some air-borne viruses floating in the room. Which line of defence will try to protect the boy from the viruses that entered through his nose?

3. A girl eats a piece of contaminated meat that has been left out for hours. Which line of defence will try to protect the girl from the *Salmonella* on the meat?

4. The hepatitis virus is attacking the liver cells and producing more viral particles in the body. Which line of defence will try to protect the individual from the hepatitis virus that is in the body?

5. A man has a large, deep wound in his leg because he was cut by a sharp piece of metal. The break in the skin on his leg starts to become red and swollen. Which line of defence will try to protect the man?

6. A woman has bronchitis. She is experiencing shortness of breath, and has a persistent cough and a high fever. Which line of defence will try to protect the woman from the pathogen that is making her sick?

7. A young boy accidentally steps on a rusty nail with his bare foot. He now has a puncture wound and his foot starts to become inflamed. Which line of defence will try to protect the boy from the bacteria that cause tetanus?
