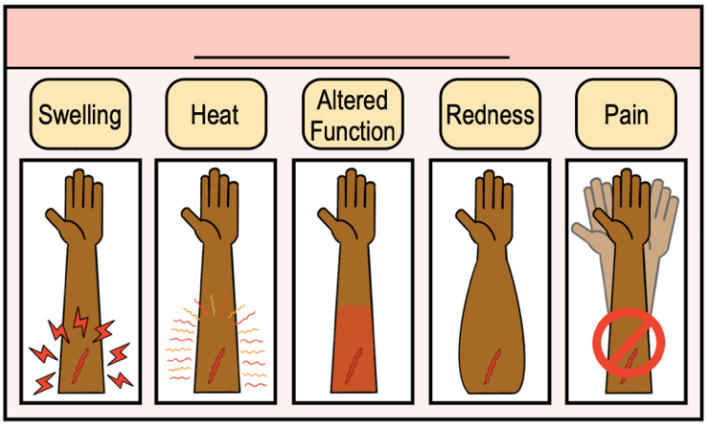
CONCEPT: INTRODFUCTION TO INNATE IMMUNITY

●*Recall:* **Innate Immunity:** routine protective mechanisms present at birth that protect against a *broad range* of pathogens.

□ Innate immune responses develop fast (within hours) & do _____ require previous exposure to the pathogen.

●**Inflammation:** a coordinated set of events that occur when the body detects foreign _____ or *tissue damage*.



Map of the Lesson on Innate Immunity

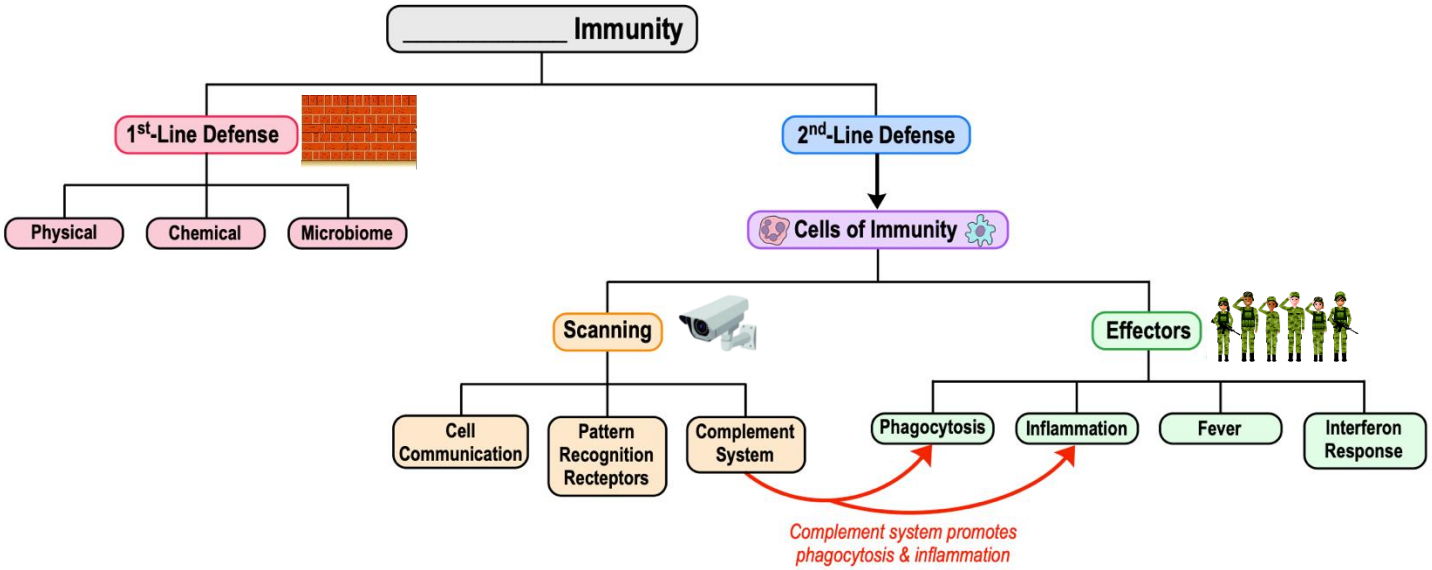
●Innate Immunity has ____ lines of defense:

1) _____-Line Defenses: prevent microbes from *entering* tissues in the body.

2) _____-Line Defenses: cells of *innate immunity* work to *ID* & *eliminate* microbes that bypass 1st line defenses.

2a) Scanning Systems: _____ body to *sense/detect* signs of invading microbes (using *sentinel* cells).

2b) Innate Effectors: innate actions that _____ microbes *identified* by scanning systems.



CONCEPT: INTRODUCTION TO INNATE IMMUNITY

PRACTICE: Skin and mucous membranes are mostly involved in:

a) Adaptive immunity.
b) Autoimmunity.
c) Irregular immunity.
d) Innate immunity.

PRACTICE: The 1st line of defense that the body uses to prevent infection includes?

a) Physical barriers to infection (skin).
b) Chemical barriers to infection (saliva & stomach acid).
c) Cells of the innate immune system.
d) Fever and inflammation.
e) A and B.
f) C and D.

PRACTICE: A patient consumed food contaminated with pathogenic bacteria. However, the patient did not become ill. The doctor explained to the patient that the acidity of the patient's stomach can kill many organisms, including bacteria. This type of protection would be classified as?

a) Adaptive immunity; which provides nonspecific immunity.
b) Adaptive immunity; which provides immunity against specific pathogens.
c) Innate immunity; which provides nonspecific immunity.
d) Innate immunity; which provides immunity against specific pathogens.

PRACTICE: Antibodies are a part of which type of immunity and why?

a) Adaptive immunity; Antibodies recognize specific antigens/pathogens.
b) Innate immunity; Antibodies are able to recognize any type of antigen/pathogen.
c) Evolutionary immunity; Antibodies can easily change to recognize any new antigen/pathogen.