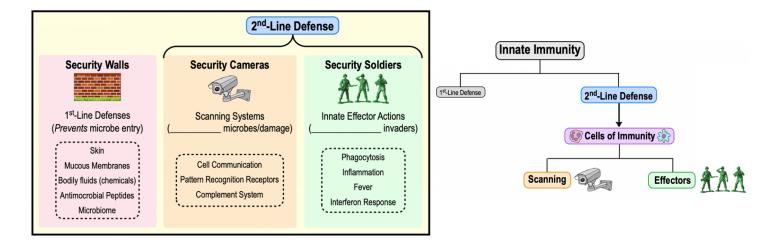
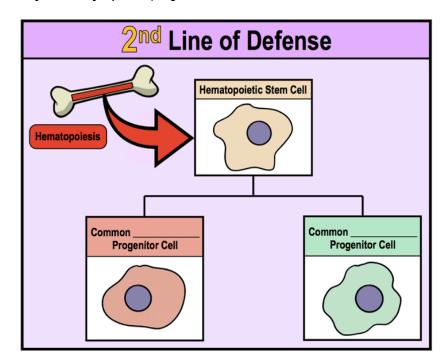
CONCEPT: INTRODUCTION TO CELLS OF THE IMMUNE SYSTEM

- Recall: The 2nd line of defense of innate immunity involves _____ main types of cells.
 - 1) Sentinel Cells: look-out or guard cells part of the ______ system that detect invading microbes.
 - 2) Innate Effectors: security responses that ______ microbes identified by scanning systems.



Hematopoiesis

- •There are many different types of immune system cells developed from stem cells.
- •Hematopoiesis: development of all *blood* cells from hematopoietic _____ cells found in bone marrow.
 - ☐ Hematopoietic stem cells first differentiate into common myeloid or lymphoid ______ cells.
 - □ Common **myeloid** & **lymphoid** progenitor cells then differentiate into all ______ types of blood cells.



CONCEPT: INTRODUCTION TO CELLS OF THE IMMUNE SYSTEM

PRACTICE: In humans, stem cells from which all blood cell types are developed are found in the:

a) Peripheral circulation.

c) Lymphatic vessels.

b) Bone marrow.

d) Lymph nodes.

Map of the Lesson on Cells of the Immune System

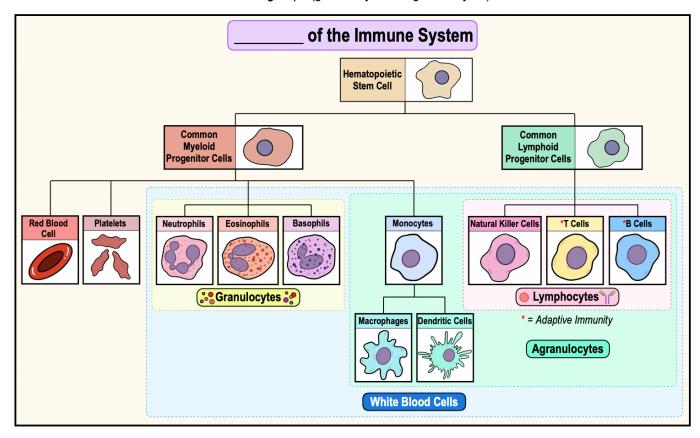
●There are	major types	of blood cells that	differentiate from com	mon myeloid OR ly	mphoid progenitor cells:
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1) Red Blood Cells (Erythrocytes): carry oxygen gas (_____) throughout the blood.

2) Platelets: important for blood .

3) _____ Blood Cells (Leukocytes): important for the host's immune system.

□ Can be divided into ____ groups (*granulocytes* & *agranulocytes*).



PRACTICE: The hematopoietic stem cell has the ability to develop into which of the following cell types?

- 1. Macrophage.
- Red Blood Cell.
- 3. Neutrophil.
- 4. B Cell.
- Dendritic cell.

- a) 2 & 4.
- b) 1, 2, & 5.
- c) 1, 3, 4, & 5.
- d) 1, 2, 3, 4, & 5.