

# 1.5 – IMMUNE SYSTEM NOTES (SCIENCE 8)

## Immune System:

- The body system that \_\_\_\_\_
- Has three \_\_\_\_\_ to protect us from pathogens

### 1. The First Line of Defense: skin and linings of internal body systems

#### A) \_\_\_\_\_

- Skin is a \_\_\_\_\_ barrier to keep pathogens from entering body
- \_\_\_\_\_ and natural body acids: kill pathogens on skin \_\_\_\_\_

#### B) Linings of the \_\_\_\_\_ system

- \_\_\_\_\_ in your nose and throat: \_\_\_\_\_ pathogens and move them back out of your body
- \_\_\_\_\_: pathogens get caught in sticky mucus and are removed from your body when you \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_

#### C) Contents and linings of the \_\_\_\_\_ system

- Strong \_\_\_\_\_ in your \_\_\_\_\_: kill many types of pathogens
- Mucus: \_\_\_\_\_ pathogens that are then removed by \_\_\_\_\_

### 2. The Second Line of Defense: white blood cells and inflammation

#### A) White Blood Cells (\_\_\_\_\_)

- \_\_\_\_\_ pathogens that get through the \_\_\_\_\_ line of defence
- Some WBCs release \_\_\_\_\_ that make it easier for other WBCs to kill pathogens

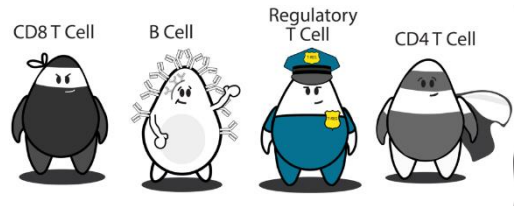
#### B) Inflammation

- A process that causes a part of the body to become \_\_\_\_\_
- Occurs if you have an \_\_\_\_\_ or \_\_\_\_\_
- Increased blood flow → \_\_\_\_\_ move into the affected area and \_\_\_\_\_

### 3. The Third Line of Defence: specialized white blood cells

#### A) Specialized white blood cells (e.g. T cells, B cells)

- Recognize pathogens that they have previously fought
- If the same pathogen enters the body in the future, they \_\_\_\_\_ so you don't get sick again



#### B) T cells: \_\_\_\_\_

#### B cells: \_\_\_\_\_

(Antibodies are particles in the bloodstream that \_\_\_\_\_ produced by \_\_\_\_\_ . Antibodies \_\_\_\_\_ to and \_\_\_\_\_ pathogens and infected cells.

