

The worksheet below is adapted from

- A. Fundamentals of Anatomy and Physiology (9<sup>th</sup> Ed) by Martin et al
- B. Human Anatomy and Physiology Lab Manual (9<sup>th</sup> Ed) by Marieb and Mitchell

Immune response: when an antigen triggers an immune response it usually activates both T cells and B cells. T cells are usually activated first, but only after phagocytes have been exposed to the antigen. Once activated, T cells attack the antigen and stimulate the activation of B cells. Activated B cells mature into cells that produce antibodies (Ab). Ab in the bloodstream then bind to and attack the antigen.

1. Name the 4 major types of T cells and their roles:
2. T cells are activated through exposure to an antigen, but this does not usually occur through direct interaction. Describe how antigens are usually presented to the T-cell.
3. How do T cells recognize antigen?
4. Provide a summary of the Pathways of T cell activation.
5. Provide a summary of B cell activation.
6. Complete the following table:

Class of antibody	Brief description of role

7. Briefly summarize the 7 methods by which antigens can be eliminated: