## **Keywords and Phrases for B-Lymphocytes**

circulate back and forth between the blood and the lymphoid system of the body

each B-lymphocyte becomes genetically programmed through a series of gene-splicing reactions to produce an antibody molecule with a unique specificity for binding a specific epitope

enable activated B-lymphocytes to proliferate

effector T4-lymphocyte producing cytokines that interact with that B-lymphocyte

the antigen is engulfed, placed in a phagosome, and degraded with lysosomes

MHC-II/peptide complexes can then be recognized by complementary shaped T-cell receptors (TCRs) and CD4 molecules on an effector T4-lymphocytes

peptide epitopes are bound to MHC-II molecules and placed on the surface of the B-lymphocyte

promote the differentiation of B-lymphocytes into antibody-secreting plasma cells as well as B-memory lymphocytes